

**ECONOMIC GROWTH  
ANALYSIS SYSTEM:**

**VERSION 4.0  
USER'S GUIDE**

**FINAL DRAFT**

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## **ACRONYMS AND ABBREVIATIONS**

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BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CAAAs	Clean Air Act Amendments of 1990
DOE	U.S. Department of Energy
EGAS	Economic Growth Analysis System
EIA	Energy Information Administration
EPA	U.S. Environmental Protection Agency
EPS	Emissions Preprocessor System
FIPS	Federal Information Processing System
NAAQS	National Ambient Air Quality Standards
REMI	Regional Economic Models, Inc.
RFP	Reasonable Further Progress
SCC	Source Classification Code
SIC	Standard Industrial Classification
U.S.	United States
VMT	Vehicle Miles Traveled

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# **CHAPTER 1**

## **INTRODUCTION**

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### **BACKGROUND**

The 1990 Clean Air Act Amendments (CAAA) called for Reasonable Further Progress (RFP) inventories to be submitted to the United States (U.S.) Environmental Protection Agency (EPA) for the purpose of demonstrating strategies by which a 15 percent reduction in emissions would be achieved over the years 1990 to 1996. This requirement applied to moderate, serious, severe, and extreme ozone nonattainment areas. In addition, serious, severe, and extreme nonattainment areas must demonstrate at least a 3 percent reduction (averaged over 3-year increments) beginning in 1996 and continuing thereafter until attainment is reached.

A key component of the RFP inventory was the development of credible emissions growth factors. The Economic Growth Analysis System (EGAS) is an EPA economic and activity forecast model that provides credible growth factors for developing projected emission inventories. EGAS Version 1.0 was developed in 1993, Version 2.0 was developed in 1994, and Version 3.0 was developed in fiscal year 1995.

With the advent of the revised National Ambient Air Quality Standards (NAAQS), States will be required to perform modeling of their new nonattainment areas. A key component of this modeling is the continued availability of credible growth factors for use in projecting emission inventories.

### **PURPOSE**

The purpose of this document is to provide a guide to running EGAS Version 4.0. This chapter provides background information on the system. Chapter 2 describes EGAS 4.0 installation and operations by explaining the logical progression of the program and presenting sample EGAS screens. Chapter 3 presents the format and contents of the output files created by EGAS 4.0. Appendix A presents a comprehensive list of the counties included in EGAS 4.0, and matches each county to one of the 75 modeling areas included in the program. A companion document describes information on the data sources and methodologies EGAS 4.0 uses to develop emissions activity growth factors.<sup>1</sup> EPA strongly recommends that this companion document be reviewed before reading this User's Guide.

### **SYSTEM REQUIREMENTS**

The following are the minimum system requirements for running EGAS Version 4.0:

- Microsoft Windows 95 or later, or Microsoft Windows NT Workstation 4.0 or later.
- 486DX/66 MHz or higher processor (Pentium or higher processor recommended), or any Alpha processor running Microsoft Windows NT Workstation.
- VGA or higher-resolution screen supported by Microsoft Windows.
- 16 MB of RAM for Windows 95, 32 MB of RAM for Windows NT Workstation.
- Mouse or other pointing device.

The installed program also requires at least 6 MB of disk space. Additional hard disk space will be required to store the output created by the user. Note that disk space requirements may be large when creating output files with many projection years and/or geographic areas.

## **REFERENCES**

1. E.H. Pechan & Associates, Inc., "Economic Growth Analysis System: Version 4.0 Reference Manual, Final Draft," Prepared for Emission Factor and Inventory Group, Emissions, Monitoring, and Analysis Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. January 26, 2001.

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## CHAPTER 2

# EGAS 4.0 INSTALLATION AND OPERATION

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This chapter describes how to install and operate EGAS 4.0. Sample screens are included to facilitate the discussion.

### **INSTALLATION**

To install and setup EGAS 4.0 on a personal computer for your particular area, double-click or run the appropriate “.exe” file for the modeling region you wish to install, and follow the installation instructions (it is recommended that all Windows applications be closed before installing EGAS 4.0). To determine the appropriate “.exe” file, Appendix A presents a match between counties and EGAS 4.0 modeling regions. Table 2-1 displays EGAS 4.0 modeling region abbreviations. The EGAS 4.0 region abbreviation in this table matches the region abbreviations in Appendix A.

After clicking on the appropriate file, the utility will guide you through the setup process. Once the program is installed on your computer, you may start the program by selecting EGAS from the Program Manager. To uninstall the EGAS program, select Control Panel from the Program Manager, select Add/Remove Programs and then select EGAS.

**Table 2-1. Match Between EPA Region and EGAS 4.0 Region**

EPA REGION(S)	REGION NAME	FILE NAME	EGAS 4.0 REGION ABBREVIATION	EGAS 3.0 REGION ABBREVIATION
I	Northeast	EGAS4_NE.exe	NE	NE
II & III	Mid-Atlantic	EGAS4_M.exe	M	M
IV	Southeast	EGAS4_S.exe	S	S
V	Great Lakes	EGAS4_G.exe	G	G
VI	Southwest	EGAS4_W.exe	W	SW
VII	Plains	EGAS4_PL.exe	PL	PL
VIII & X	Rocky Mountain	EGAS4_R.exe	R	RM
IX	Far West	EGAS4_FW.exe	FW	FW

Table 2.2 displays the full name of each EGAS 4.0 modeling region. Appendix A presents a list of the States and counties included in each region.

**Table 2-2. List of EGAS Version 4.0 Modeling Regions**

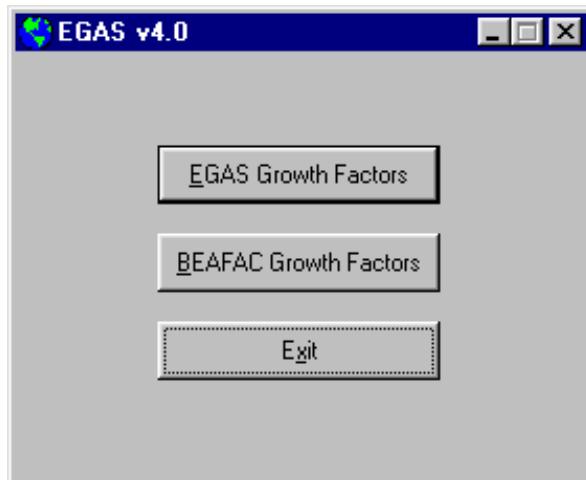
MODEL	MODEL DESCRIPTION
NE1	Boston Nonattainment Area
NE2	Greater Connecticut Nonattainment Area
NE3	Portsmouth Nonattainment Area
NE4	Providence Nonattainment Area
NE5	Springfield Nonattainment Area
NE6	Attainment Portion of New Hampshire
NE7	Maine
NE8	Vermont
M1	New York-New Jersey-Long Island Nonattainment Area
M2	Baltimore Nonattainment Area
M3	Philadelphia-Wilmington-Trenton Nonattainment Area
M4	Washington, DC Nonattainment Area
M5	Huntington-Ashland Nonattainment Area
M6	Attainment Portion of New York
M7	Attainment Portion of New Jersey
M8	Attainment Portion of Pennsylvania
M9	Attainment Portion of Delaware
M10	Attainment Portion of Virginia
M11	Attainment Portion of West Virginia
M12	Attainment Portion of Maryland
S1	Atlanta Nonattainment Area
S2	Louisville Nonattainment Area
S3	Attainment Portion of Kentucky
S4	Attainment Portion of Georgia
S5	Tennessee
S6	Rest of North Carolina
S7	Raleigh-Durham Nonattainment Area
S8	Charlotte Nonattainment Area
S9	Greensboro-Winston Salem Nonattainment Area
S10	Mississippi
S11	Alabama
S12	Attainment Portion of South Carolina
S13	Florida
G1	Chicago-Gary-Lake County Nonattainment Area
G2	Milwaukee-Racine Nonattainment Area
G3	Muskegon Nonattainment Area
G4	Sheboygan Nonattainment Area
G5	Cincinnati-Hamilton Nonattainment Area
G6	St. Louis Nonattainment Area
G7	Attainment Portion of Illinois
G8	Attainment Portion of Indiana

**Table 2-2 (continued)**

<b>MODEL</b>	<b>MODEL DESCRIPTION</b>
G9	Attainment Portion of Wisconsin
G10	Attainment Portion of Ohio
G11	Attainment Portion of Michigan
G12	Attainment Portion of Minnesota
W1	Houston-Galveston-Brazoria Nonattainment Area
W2	Baton Rouge Nonattainment Area
W3	Beaumont-Port Arthur Nonattainment Area
W4	El Paso Nonattainment Area
W5	Attainment Portion of Texas
W6	Attainment Portion of Louisiana
W7	New Mexico
W8	Oklahoma
W9	Arkansas
PL1	Attainment Portion of Missouri
PL2	Kansas
PL3	Nebraska
PL4	Iowa
R1	Colorado
R2	Utah
R3	Wyoming
R4	North Dakota
R5	South Dakota
R6	Montana
R7	Idaho
R8	Oregon
R9	Washington
FW1	Los Angeles-South Coast Air Basin Nonattainment Area
FW2	San Diego Nonattainment Area
FW3	Ventura County Nonattainment Area
FW4	Sacramento Metro Nonattainment Area
FW5	San Joaquin Valley Nonattainment Area
FW6	Attainment Portion of California
FW7	Nevada
FW8	Arizona

## MAIN SCREEN

The first screen when you initially start EGAS 4.0 is Figure 2-1. The first option that a user selects is whether to develop growth factors based on EGAS data sources and algorithms (selected by clicking on the “EGAS Growth Factors” button) or based on BEA’s regional projections series (“BEAFAC Growth Factors” button).



**Figure 2-1. EGAS 4.0 Main Screen**

## USER SETTINGS SUMMARY SCREEN

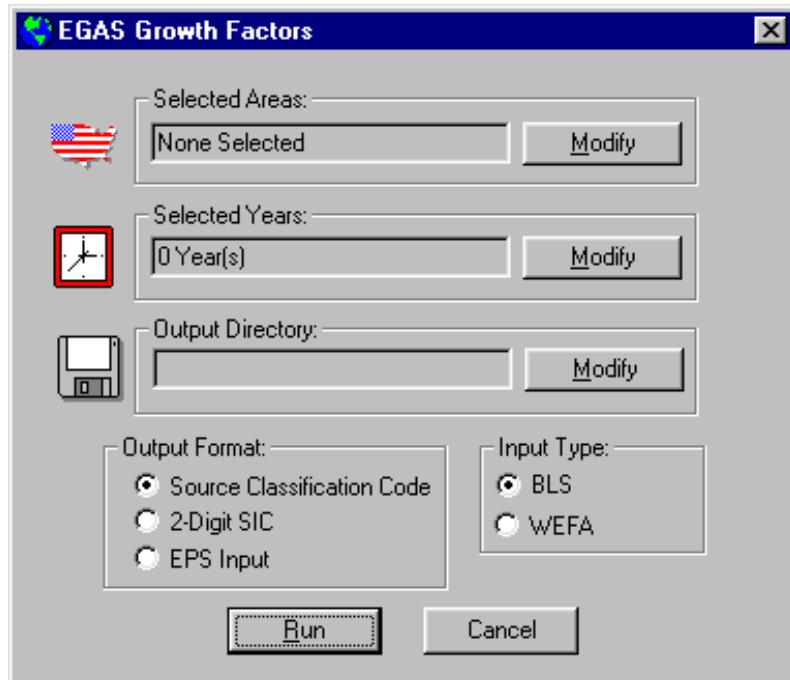
The purpose of the next EGAS 4.0 screen is to summarize the user settings for a particular model run. Figure 2-2 displays a view of this screen the first time EGAS is run and after a user selects the “EGAS Growth Factors” button in Figure 2-1 (with the exception of the title of the screen and the omission of the output option listed as “EPS Input,” this same screen is shown when the “BEAFAC Growth Factors” button is selected). Because the remainder of the operation of EGAS 4.0 operation is the same under the BEAFAC output, a separate discussion is not presented for this output option.

As indicated in Figure 2-2, there are a number of user settings displayed in this screen. The first box at the top of the screen identifies the number of counties selected; the second box displays the number of years selected; the third box indicates the directory for the output from the model run. The “Output Format” section of this screen lists three different output file options:

- Source Classification Code;
- 2-Digit SIC; and
- EPS Input.

The *Source Classification Code* output format develops growth factors by SCC. The *2-Digit SIC* output format prepares growth factors by 2-digit Standard Industrial Classification (SIC) code. The *EPS Input* format develops growth factors in the format required for input to the Emissions

Preprocessor  
Appendix B  
format of the files  
each EGAS 4.0



System (EPS).  
displays the  
created under  
output option.

**Figure 2-2. Initial User Settings Summary Screen**

The default set of EGAS 4.0 macroeconomic projections is from the Bureau of Labor Statistics (BLS); an alternative set of macroeconomic projections from Wharton Econometric Forecasting Associates (WEFA) is also included in the program. There are two input file options displayed in Figure 2-2 that relate to the two alternative sets of national macroeconomic projections that drive the EGAS 4.0 regional models developed by Regional Economic Models, Inc. (REMI). The REMI economic models are central to the development of growth factors for the majority of the nearly 10,000 SCCs included in EGAS 4.0. More discussion of the REMI economic models and assignment of growth indicators to SCCs is provided in the EGAS 4.0 Reference Manual.<sup>1</sup>

To review and/or modify the county, year, or output directory selections for an EGAS 4.0 run, the user clicks on the “Modify” button next to the “Selected Areas,” “Selected Years,” and “Output Directory” boxes. The following sections describe the region, county, and output directory selection screens that appear after clicking the “Modify” button located next to these boxes.

## REGION SELECTIONS SCREEN

Figure 2-3 presents a sample EGAS 4.0 region selections screen for the Northeast region (EPA Region I). The “Area Listing” portion of this screen lists each EGAS modeling area within the region.

Clicking on any of the modeling areas on this list, updates the “County Selections” window on this screen with the list of counties included in this modeling area. Figure 2-4 presents a sample region selections screen after the user selects the “NE8 Vermont” modeling

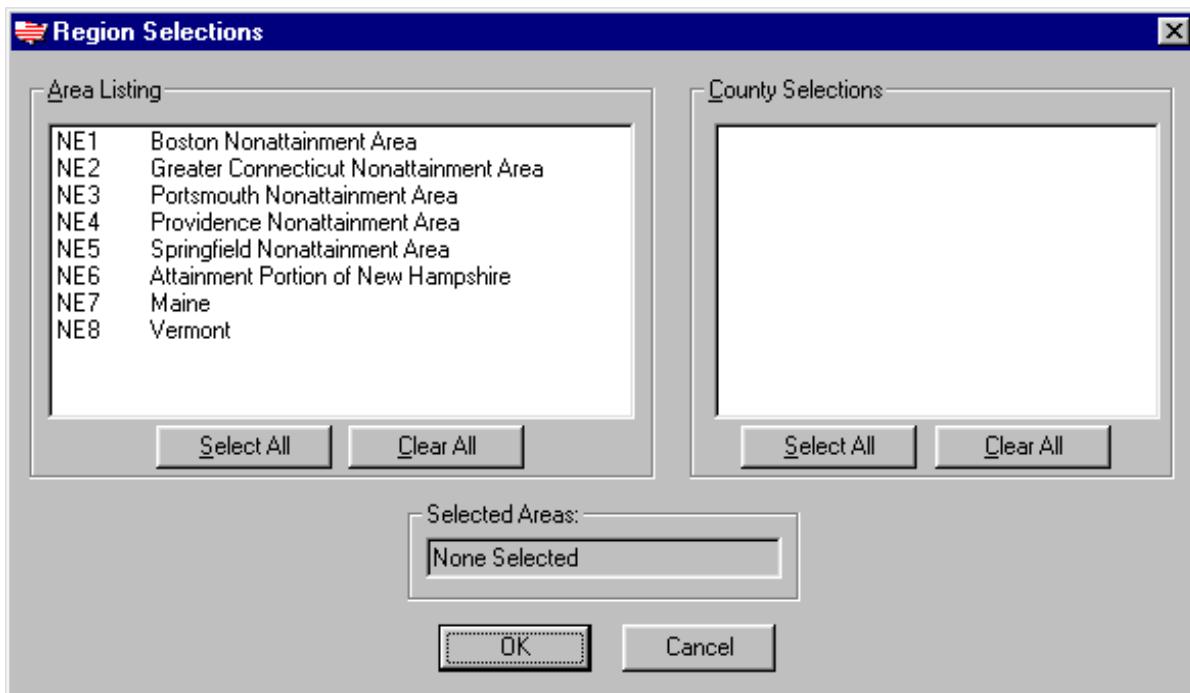


Figure 2-3. Region Selections Screen

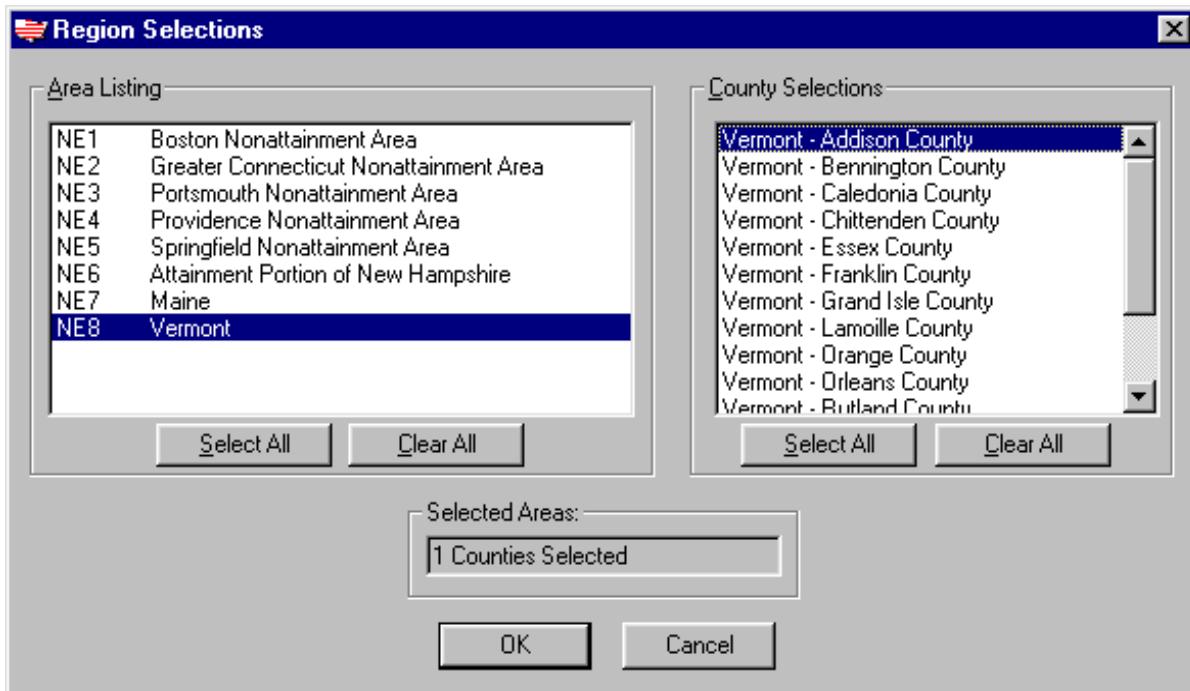
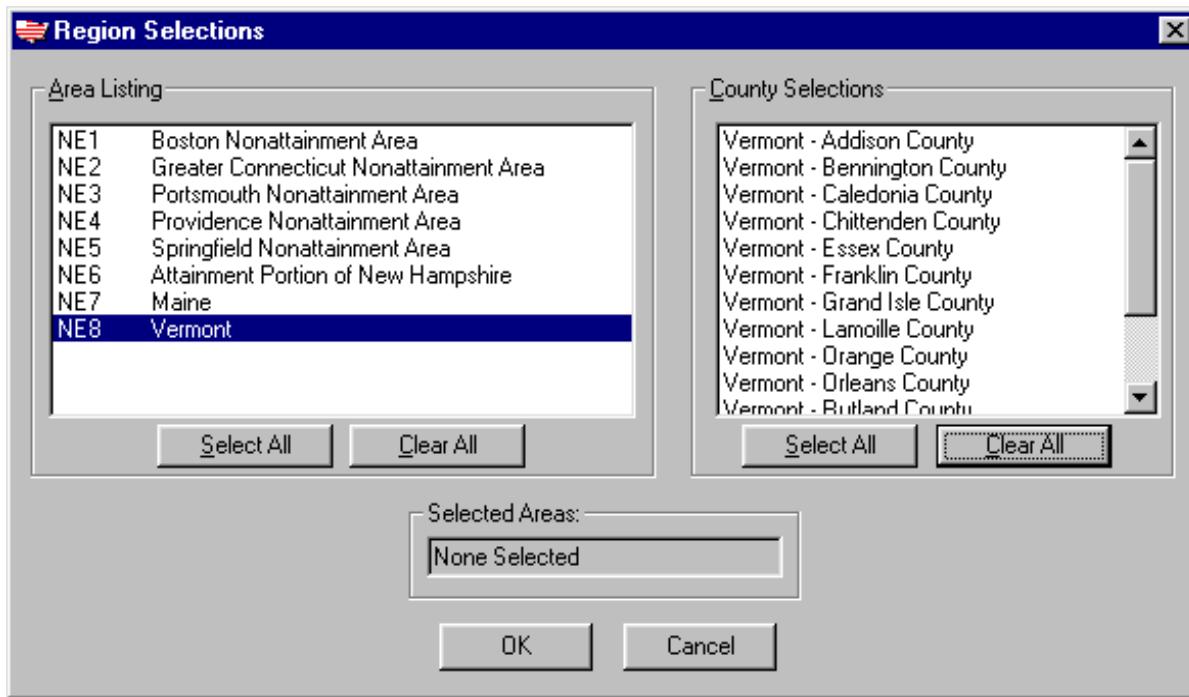


Figure 2-4. County Selections Screen

area option. As noted in Figure 2-4, Addison County is highlighted. The “County Selections” window in the Region Selections Screen will highlight any counties that were selected in the previous EGAS model run. In the example displayed in Figure 2-4, therefore, the user had last run EGAS for this single county. The program saves the county selections in this screen when the user clicks on the “OK” button. To clear all previous county selections, the user clicks on the “Clear All” button located beneath the “County Selections” window.

Figure 2-5 displays the region selections screen after clicking on the “Clear All” button. Note that the “Selected Areas” box at the bottom of the screen now displays “None Selected.” Individual counties can be deselected by clicking on the highlighted county (the counties are then displayed without highlighting). Users can select all counties within an EGAS modeling area by clicking on the modeling area in the “Area Listing” window and then clicking on the “Select All” button under the “County Selections” window. When the user is finished revising the county selections in this screen, they should click on the “OK” button. Clicking on the “Cancel” button will restore the county selections that had been saved when entering the region selections screen. Clicking on the “OK” or “Cancel” buttons, returns you to the user settings summary screen (Figure 2-2). This screen will now be updated to reflect the number of counties selected within the region selections screen.



**Figure 2-5. Updated Region Selections Screen**

## YEAR SELECTIONS SCREEN

Figure 2-6 displays a sample year selections screen. This screen is opened when the “Modify” button next to the “Selected Years” window is clicked. Under this example, EGAS will be run for projection years 1996, 2000, and 2005 (EGAS always outputs 1996 growth factors of ‘1.0’ for all SCCs). Additional years can be added by clicking on individual years. All years can be selected by

clicking on the “Select All” button; likewise, the “Clear All” button will clear all year selections. When you are done selecting the projection years for the EGAS modeling run, you should click on the “OK” button (clicking on the “Cancel” button will restore the year selections that had been saved when entering the region selections screen), which returns you to the user settings summary screen. This screen will now be updated to reflect the number of years selected in the year selections screen (Figure 2-7).

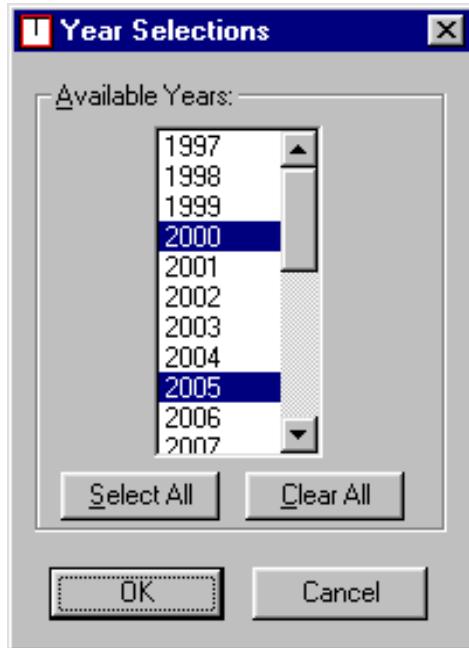


Figure 2-6. Year Selections Screen

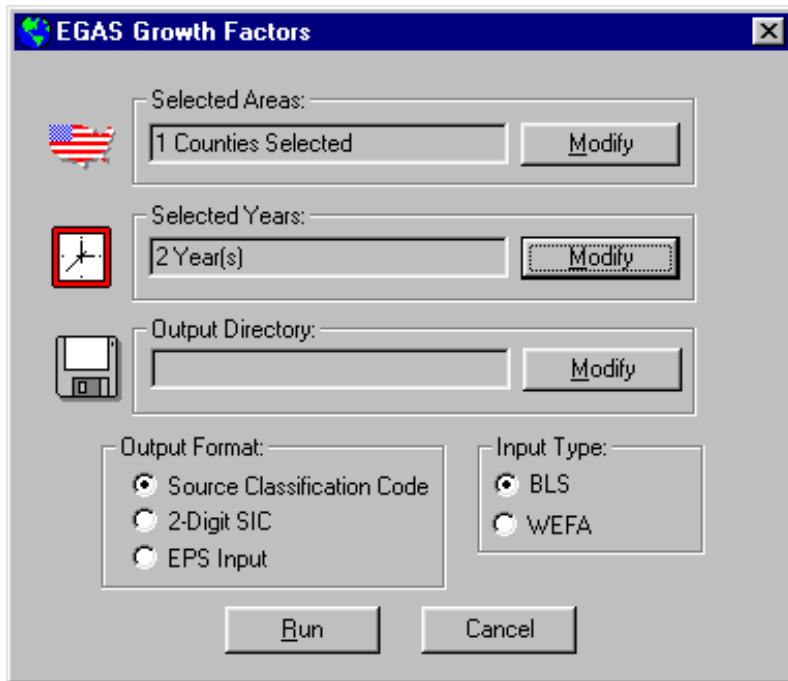


Figure 2-7. Updated User Settings Summary Screen

## OUTPUT DIRECTORY SCREEN

Figure 2-8 displays a sample output directory screen. This screen is opened when the “Modify” button next to the “Output Directory” window is clicked. Before EGAS is run for the first time, this window displays the directory in which EGAS 4.0 was installed (subsequent model runs display the previous user-selected directory setting). To separate the growth factor output from the program files, EGAS users should specify a non-EGAS installation directory for the model output files. The user can select an existing directory or create a new directory by clicking on the appropriate Windows directory navigation buttons at the top of the screen, or by typing-in the name of the directory in the folder window toward the bottom of the screen. The program will ask if the user wants to create a new directory before doing so. In the Figure 2-9 example, the user has selected “D:\EGAS\Output\” as the output directory for this EGAS run. After the EGAS user has identified the output directory for the EGAS modeling run, they should click on the “Open” button, which returns the user to the user settings summary screen. This screen will now be updated to reflect the output directory just entered (Figure 2-10).

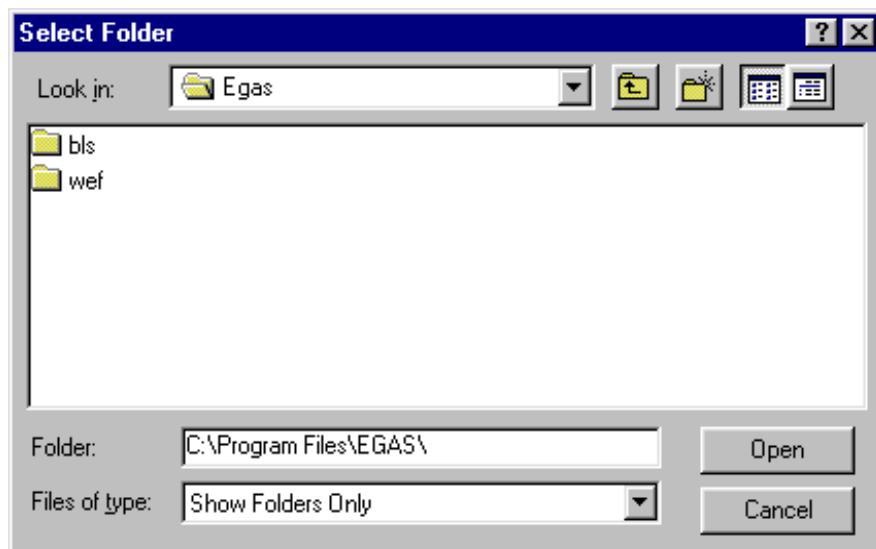


Figure 2-8. Initial Output Directory Screen

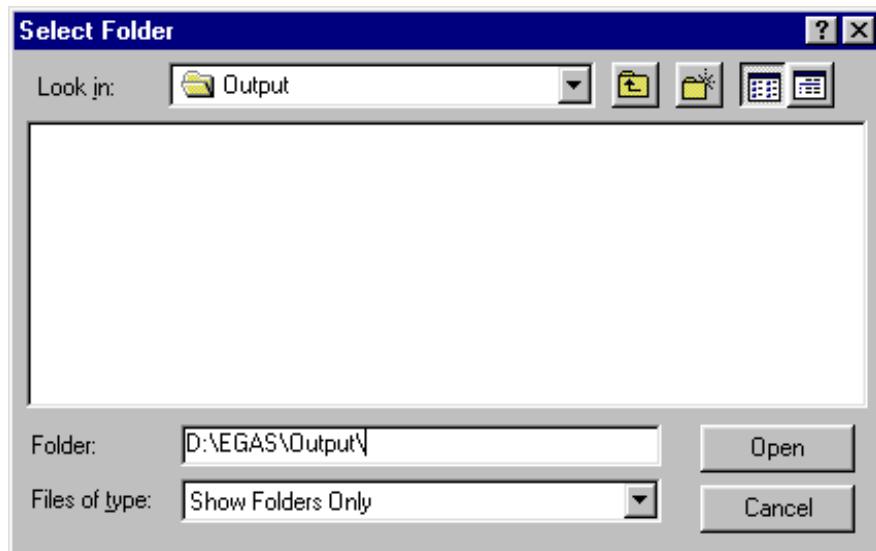


Figure 2-9. Updated Output Directory Screen

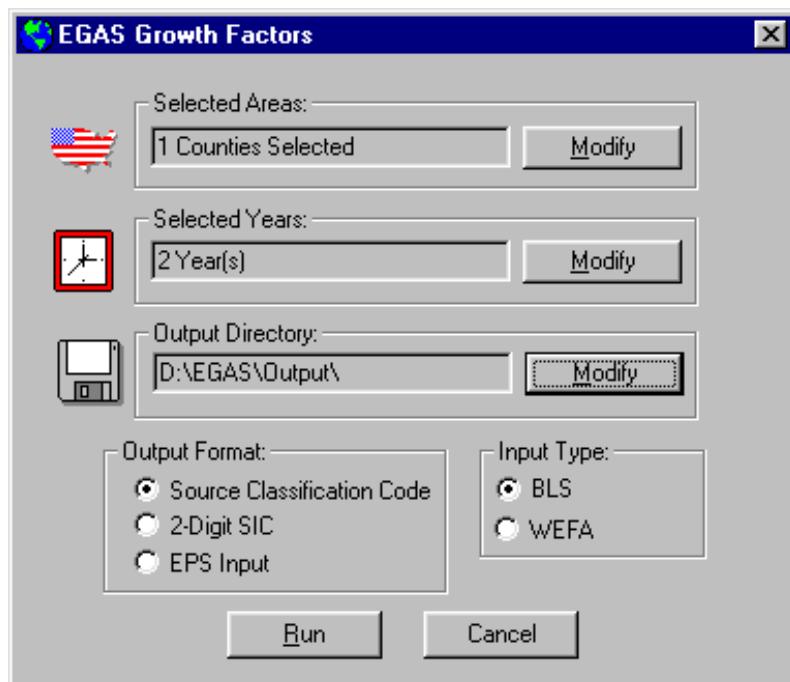
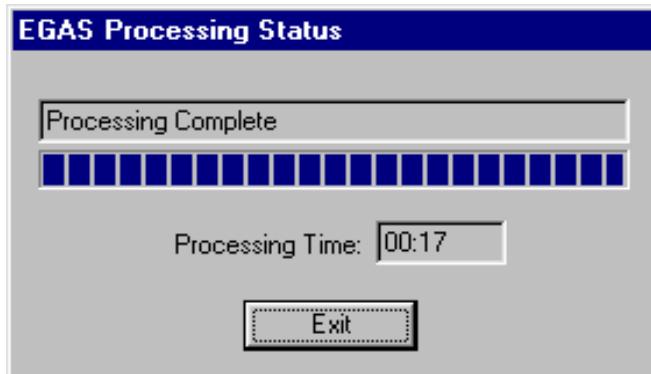


Figure 2-10. Updated User Settings Summary Screen

The user can then review and revise, if desired, the output format and the input type selections before clicking the “Run” button, which begins model processing. After this button is clicked, a new window appears displaying the status of EGAS processing, including elapsed processing time. Figure 2-11 presents this processing status screen as it appears at the end of a sample model run.



**Figure 2-11. Sample Processing Status Screen**

## REFERENCES

1. E.H. Pechan & Associates, Inc., “Economic Growth Analysis System: Version 4.0 Reference Manual, Final Draft,” Prepared for Emission Factor and Inventory Group, Emissions, Monitoring, and Analysis Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. January 26, 2001.

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## **CHAPTER 3**

## **EGAS 4.0 OUTPUT FILES**

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The purpose of this chapter is to describe the format and contents of the output files created by EGAS 4.0. A list of these output files is displayed in Table 3-1. Each EGAS 4.0 output file is saved in ASCII format in the directory specified by the user. All EGAS growth factors are reported as an index where the base year (1996) growth factor is equal to '1.0.' After exiting EGAS, the user can view and print these ASCII files using any standard ASCII file reader. The years corresponding to the growth factors will be listed in the header at the top of each file along with the file name and summary information as to the source of the growth factor information in the file. Appendix B presents output formats for each of these files.

### **EGAS GROWTH FACTORS OPTION**

There are three output options when a user wants to create EGAS growth factors. These output options are discussed in the following subsections.

#### **Source Classification Code Output Option**

The *Source Classification Code (SCC)*-based output option in EGAS employs a Crosswalk module match between SCCs and the growth factor data developed from the REMI, U.S. Department of Energy's Energy Information Administration (EIA), NONROAD model, and vehicle miles traveled (VMT) forecasting approaches described in the EGAS 4.0 Reference Manual.<sup>1</sup> When running the SCC-based output option, EGAS develops eight files, which are identified in Table 3-1. The format of each file is the same, with all files containing the following fields:

STATE  
COUNTY  
SCC  
GROWTH FACTOR (one year per column)

Descriptions for the SCCs in each file can be identified from EPA's comprehensive SCC list, which is located on EPA's web-site at <http://www.epa.gov/ttn/chief/codes/index.html>. EGAS 4.0 was developed using an earlier comprehensive list of SCCs, and, therefore, currently develops growth factors for 9,900 of the 10,389 SCCs on EPA's list updated on November 1, 2000. The following two subsections provide an overview of the growth factors output under the *SCC* output option. More detailed information on the development of these growth factors can be found in the EGAS 4.0 Reference Manual.<sup>1</sup>

**Table 3-1. EGAS Version 4.0 Growth Factor File Names**

<b>EGAS Output Option</b>	<b>BEAFAC Output Option</b>
<i>Source Classification Code (SCC) Output</i>	
Area_fuel.scc	Area_fuel.bea
Com_fuel.scc	Com_fuel.bea
Electric.scc	Electric.bea
Ind_fuel.scc	Ind_fuel.bea
Other.scc	Other.bea
Phy.scc	Phy.bea
Res_fuel.scc	Res_fuel.bea
Vmt_out.scc	
<i>2-Digit SIC</i>	
Com_fuel.sic	Com_fuel.bea
Electric.sic	Electric.bea
Ind_fuel.sic	Ind_fuel.bea
Phy.sic	Phy.bea
<i>EPS-Input*</i>	
Project.ams	
Project.pts	

\* EPS-input is not an option for EGAS' BEAFAC because BEAFAC growth factors can be generated from within EPS.

#### Description of contents of EGAS 4.0 output files

- Area\_fuel.xxx -** growth factors for total area source fuel combustion sectors.
- Com\_fuel.xxx -** growth factors for commercial fuel combustion sectors.
- Electric.xxx -** growth factors for electric generation sectors.
- Ind\_fuel.xxx -** growth factors for industrial fuel combustion sectors.
- Other.xxx -** growth factors for sectors assigned a “no growth” assumption (all years = ‘1.0’).
- Phy.xxx -** growth factors for all non-fuel combustion/non-onroad vehicle sectors.
- Res\_fuel.xxx -** growth factors for residential fuel combustion sectors.
- Vmt\_out.xxx -** growth factors for onroad vehicle sectors [vehicle miles traveled (VMT)].
- Project.ams -** growth factors for area sources in EPS-input file format.
- Project.pts -** growth factors for point sources in EPS-input file format.

## **Fuel Combustion Growth Factors**

Fuel combustion-related source category growth factors are generated from forecast energy consumption data developed for the EIA’s “Annual Energy Outlook.”<sup>2</sup> Growth factors for these source categories are reported by fuel type by State, county, and SCC. As noted in Table 3-1, the SCCs displayed in each file are specific to the energy sector. Appendix B in the EGAS Reference Manual identifies the EIA fuel type that was linked to each SCC in developing growth factors for fuel combustion sectors.<sup>1</sup>

## **Other Growth Factors**

The majority of SCCs under the standard EGAS output option are assigned growth factors from the Physical Output module. The growth factors for these SCCs are output in the “Phy.scc” file. As noted in the EGAS Reference Manual, most of these growth factors are based on constant dollar output forecasts from REMI’s economic models, which are generated at the Bureau of Labor Statistics (BLS) sector level and assigned to SCCs in the Crosswalk module. For certain larger emitting SCCs, these output projections are adjusted by coefficients relating changes in REMI data to changes in emissions activity. These coefficients were determined by the regression analyses described in the EGAS Reference Manual.<sup>1</sup> Nonroad source categories generally use growth factors based on factors included in EPA’s draft NONROAD model.

The file “Vmt\_out.scc” contains growth factors for on-road mobile source categories. For these SCCs, EGAS computes growth factors based on VMT projections. For less than 40 SCCs, EGAS applies a no growth assumption. For these SCCs, growth factors in each projection year are set equal to ‘1.0.’ These SCCs are output in the file “Other.scc.”

## **2-Digit Standard Industrial Classification Code Output Option**

EGAS can also output *2-Digit SIC* code based growth factors. When running this output option, EGAS develops four files, which are identified in Table 3-1. There are two types of formats produced under this output option. The first format, which is used for the “Phy.sic” file, includes the following fields:

STATE  
COUNTY  
SIC  
GROWTH FACTOR (one year per column)

This file is produced using constant dollar output-based growth factors from the REMI economic models. Under this option, EGAS uses the Crosswalk module to link BLS sectors to *2-Digit SIC* codes.

The second format is used for the three fuel combustion-related files (i.e., Com\_fuel.sic, Electric.sic, and Ind\_fuel.sic). This format includes the following fields:

STATE  
COUNTY  
SIC  
FUEL TYPE  
GROWTH FACTOR (one year per column)

The three fuel combustion-related files report growth factors based on data from EIA's "Annual Energy Outlook."<sup>2</sup> These growth factors are computed from the EIA's energy consumption forecasts for the commercial, electric generation, and industrial sectors. EGAS reports the same growth factors across all 2-digit SIC codes within the Ind\_fuel.sic and Com\_fuel.sic files (EIA's electric generation forecasts are assigned to SIC code 49). For example, EGAS distillate fuel growth factors in the Ind\_fuel.sic file (code 002), which are computed from EIA's industrial sector distillate fuel consumption forecasts, are the same across all industrial sector SIC codes (i.e., SIC codes 20-39). Table 3-2 displays the list of fuel types reported in these output files.

### **EPS-Input Option**

EGAS can output two files for use as growth factor inputs to EPS Version 2.0.<sup>3</sup> These two files reflect point source SCCs (Project.pts) and area/mobile source SCCs (Project.ams). Each record in these files consists of a Federal Information Processing System (FIPS) State and county code, followed by either the point source SCCs (Project.pts) or the area/mobile SCC (Project.ams). The final field in each file contains the EGAS growth factor (a separate record is produced in each file for each forecast year). These input files can be directly input into the EPS for developing a projection year emissions inventory for photochemical modeling.

### **BEAFAC GROWTH FACTORS OPTION**

The BEAFAC utility, which was first developed as part of the EPS, interpolates forecast data between the years projected by the Bureau of Economic Analysis. The BEAFAC program does not allow any user options (e.g., selection of a national macroeconomic forecast). This module does not input or output any of its economic data to or through the REMI models or any other part of the main EGAS model. There are in fact no economic modeling interactions between this utility and the rest of EGAS.

The data output by BEAFAC are based on the BEA's final set of projections data, which were released in 1995. Growth factors are developed from the BEA's 2-digit SIC code gross State product (value added) projections. BEAFAC assigns these State-level projections to all counties within a State. Therefore, growth is uniform across the State due to the level of detail that is available from BEA. It is important to note that fuel combustion source category growth, as with growth for all SCCs, is based on projected socioeconomic indicator growth (e.g., industrial fuel combustion is based on constant dollar output projections by 2-digit industrial SIC code) without consideration of potential future energy efficiency improvements or differential growth rates among fuel types.

**Table 3-2. Fuel Types Under 2-Digit SIC Code Output Option**

<b>FUEL CODE DESCRIPTION</b>	
<i>Com_fuel.sic &amp; Com_fuel.bea</i>	
001	Coal
002	Distillate Oil
003	Kerosene
004	Liquified Petroleum Gas
005	Motor Gasoline
006	Natural Gas
007	Renewables
008	Residual Oil
009	Total Delivered Energy
010	Total Petroleum
<i>Electric.sic &amp; Electric.bea</i>	
001	Biomass
002	Distillate Oil
003	Geothermal
004	Municipal Solid Waste
005	Natural Gas
006	Pumped Storage/Other
007	Renewables
008	Residual
009	Steam Coal
010	Total Energy
011	Total Petroleum
<i>Ind_fuel.sic* &amp; Ind_fuel.bea*</i>	
001	Blast Furnace & Coke Oven Gas
002	Distillate
007	LPG
008	Metallurgical Coal
009	Motor Gasoline
010	Natural Gas
011	Other Petroleum
012	Renewables
013	Residual
014	Steam Coal
015	Still Gas
017	Total Coal
018	Total Delivered Energy
019	Total Petroleum

Notes: \* Fuel codes 003 through 006 and 016 are not reported in these files because these codes are used in developing SCC-based growth factors (codes 003 through 006 represent heat and power-distillate fuel, heat and power-residual fuel, heat and power-natural gas, and heat and power-total energy projections for the bulk chemicals industry; and code 016 represents total energy use for other specific industrial sectors).

The VMT module cannot be accessed within the BEAFAC output option. Users must run the source classification code output option to obtain VMT growth factors.

Two BEAFAC output options are available. The first is a standard SCC-level output similar to that created under the source classification code output option, and the second is a *2-Digit SIC* code-based output. Appendix C displays the format of the output files under each option. An EPS output option is not provided within this utility because EPS includes BEA growth factor output capabilities. The BEAFAC output filenames and contents are as follows:

Area_fuel.bea	-	Total area source fuel combustion growth factors
Com_fuel.bea	-	Commercial fuel combustion growth factors
Electric.bea	-	Electric generation growth factors
Ind_fuel.bea	-	Industrial fuel combustion growth factors
Other.bea	-	SCCs assigned a no growth assumption
Res_fuel.bea	-	Residential fuel combustion growth factors
Phy.bea	-	Industrial physical output growth factors

With the exception of the “Area\_fuel.bea,” “Res\_fuel.bea,” and “Other.bea” files, the filenames are the same for either output option selected. These three files are not produced under the *2-Digit SIC* output option because no SIC codes are associated with the source categories included in these files.

## REFERENCES

1. E.H. Pechan & Associates, Inc., “Economic Growth Analysis System: Version 4.0 Reference Manual, Final Draft,” Prepared for Emission Factor and Inventory Group, Emissions, Monitoring, and Analysis Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. January 26, 2001.
2. U.S. Department of Energy, Energy Information Administration, Office of Integrated Analysis and Forecasting, “Annual Energy Outlook 1999, with Projections through 2020,” DOE/EIA-0383(99), Washington, DC. December 1998.
3. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, “User’s Guide for the Urban Airshed Model, Volume IV: User’s Manual for the Emissions Preprocessor System 2.0, Part A: Core FORTRAN System,” EPA-450/4-90-007D(R), Research Triangle Park, NC. June 1992.

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**APPENDIX A**  
**EGAS 4.0 MODELING AREAS**

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**Table A-1. EGAS 4.0 Modeling Areas**

Model Region	FIPS State	FIPS County	State	County
S11	1	1	Alabama	Autauga County
S11	1	3	Alabama	Baldwin County
S11	1	5	Alabama	Barbour County
S11	1	7	Alabama	Bibb County
S11	1	9	Alabama	Blount County
S11	1	11	Alabama	Bullock County
S11	1	13	Alabama	Butler County
S11	1	15	Alabama	Calhoun County
S11	1	17	Alabama	Chambers County
S11	1	19	Alabama	Cherokee County
S11	1	21	Alabama	Chilton County
S11	1	23	Alabama	Choctaw County
S11	1	25	Alabama	Clarke County
S11	1	27	Alabama	Clay County
S11	1	29	Alabama	Cleburne County
S11	1	31	Alabama	Coffee County
S11	1	33	Alabama	Colbert County
S11	1	35	Alabama	Conecuh County
S11	1	37	Alabama	Coosa County
S11	1	39	Alabama	Covington County
S11	1	41	Alabama	Crenshaw County
S11	1	43	Alabama	Cullman County
S11	1	45	Alabama	Dale County
S11	1	47	Alabama	Dallas County
S11	1	49	Alabama	De Kalb County
S11	1	51	Alabama	Elmore County
S11	1	53	Alabama	Escambia County
S11	1	55	Alabama	Etowah County
S11	1	57	Alabama	Fayette County
S11	1	59	Alabama	Franklin County
S11	1	61	Alabama	Geneva County
S11	1	63	Alabama	Greene County
S11	1	65	Alabama	Hale County
S11	1	67	Alabama	Henry County

Model Region	FIPS State	FIPS County	State	County
S11	1	69	Alabama	Houston County
S11	1	71	Alabama	Jackson County
S11	1	73	Alabama	Jefferson County
S11	1	75	Alabama	Lamar County
S11	1	77	Alabama	Lauderdale County
S11	1	79	Alabama	Lawrence County
S11	1	81	Alabama	Lee County
S11	1	83	Alabama	Limestone County
S11	1	85	Alabama	Lowndes County
S11	1	87	Alabama	Macon County
S11	1	89	Alabama	Madison County
S11	1	91	Alabama	Marengo County
S11	1	93	Alabama	Marion County
S11	1	95	Alabama	Marshall County
S11	1	97	Alabama	Mobile County
S11	1	99	Alabama	Monroe County
S11	1	101	Alabama	Montgomery County
S11	1	103	Alabama	Morgan County
S11	1	105	Alabama	Perry County
S11	1	107	Alabama	Pickens County
S11	1	109	Alabama	Pike County
S11	1	111	Alabama	Randolph County
S11	1	113	Alabama	Russell County
S11	1	115	Alabama	St Clair County
S11	1	117	Alabama	Shelby County
S11	1	119	Alabama	Sumter County
S11	1	121	Alabama	Talladega County
S11	1	123	Alabama	Tallapoosa County
S11	1	125	Alabama	Tuscaloosa County
S11	1	127	Alabama	Walker County
S11	1	129	Alabama	Washington County
S11	1	131	Alabama	Wilcox County
S11	1	133	Alabama	Winston County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County
FW8	4	1	Arizona	Apache County
FW8	4	3	Arizona	Cochise County
FW8	4	5	Arizona	Coconino County
FW8	4	7	Arizona	Gila County
FW8	4	9	Arizona	Graham County
FW8	4	11	Arizona	Greenlee County
FW8	4	12	Arizona	La Paz County
FW8	4	13	Arizona	Maricopa County
FW8	4	15	Arizona	Mohave County
FW8	4	17	Arizona	Navajo County
FW8	4	19	Arizona	Pima County
FW8	4	21	Arizona	Pinal County
FW8	4	23	Arizona	Santa Cruz County
FW8	4	25	Arizona	Yavapai County
FW8	4	27	Arizona	Yuma County
W9	5	1	Arkansas	Arkansas County
W9	5	3	Arkansas	Ashley County
W9	5	5	Arkansas	Baxter County
W9	5	7	Arkansas	Benton County
W9	5	9	Arkansas	Boone County
W9	5	11	Arkansas	Bradley County
W9	5	13	Arkansas	Calhoun County
W9	5	15	Arkansas	Carroll County
W9	5	17	Arkansas	Chicot County
W9	5	19	Arkansas	Clark County
W9	5	21	Arkansas	Clay County
W9	5	23	Arkansas	Cleburne County
W9	5	25	Arkansas	Cleveland County
W9	5	27	Arkansas	Columbia County
W9	5	29	Arkansas	Conway County
W9	5	31	Arkansas	Craighead County
W9	5	33	Arkansas	Crawford County
W9	5	35	Arkansas	Crittenden County
W9	5	37	Arkansas	Cross County

Model Region	FIPS State	FIPS County	State	County
W9	5	39	Arkansas	Dallas County
W9	5	41	Arkansas	Desha County
W9	5	43	Arkansas	Drew County
W9	5	45	Arkansas	Faulkner County
W9	5	47	Arkansas	Franklin County
W9	5	49	Arkansas	Fulton County
W9	5	51	Arkansas	Garland County
W9	5	53	Arkansas	Grant County
W9	5	55	Arkansas	Greene County
W9	5	57	Arkansas	Hempstead County
W9	5	59	Arkansas	Hot spring County
W9	5	61	Arkansas	Howard County
W9	5	63	Arkansas	Independence County
W9	5	65	Arkansas	Izard County
W9	5	67	Arkansas	Jackson County
W9	5	69	Arkansas	Jefferson County
W9	5	71	Arkansas	Johnson County
W9	5	73	Arkansas	Lafayette County
W9	5	75	Arkansas	Lawrence County
W9	5	77	Arkansas	Lee County
W9	5	79	Arkansas	Lincoln County
W9	5	81	Arkansas	Little River County
W9	5	83	Arkansas	Logan County
W9	5	85	Arkansas	Lonoke County
W9	5	87	Arkansas	Madison County
W9	5	89	Arkansas	Marion County
W9	5	91	Arkansas	Miller County
W9	5	93	Arkansas	Mississippi County
W9	5	95	Arkansas	Monroe County
W9	5	97	Arkansas	Montgomery County
W9	5	99	Arkansas	Nevada County
W9	5	101	Arkansas	Newton County
W9	5	103	Arkansas	Ouachita County
W9	5	105	Arkansas	Perry County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W9	5	107	Arkansas	Phillips County	FW6	6	25	California	Imperial County
W9	5	109	Arkansas	Pike County	FW6	6	27	California	Inyo County
W9	5	111	Arkansas	Poinsett County	FW5	6	29	California	Kern County
W9	5	113	Arkansas	Polk County	FW5	6	31	California	Kings County
W9	5	115	Arkansas	Pope County	FW6	6	33	California	Lake County
W9	5	117	Arkansas	Prairie County	FW6	6	35	California	Lassen County
W9	5	119	Arkansas	Pulaski County	FW1	6	37	California	Los Angeles County
W9	5	121	Arkansas	Randolph County	FW5	6	39	California	Madera County
W9	5	123	Arkansas	St Francis County	FW6	6	41	California	Marin County
W9	5	125	Arkansas	Saline County	FW6	6	43	California	Mariposa County
W9	5	127	Arkansas	Scott County	FW6	6	45	California	Mendocino County
W9	5	129	Arkansas	Searcy County	FW5	6	47	California	Merced County
W9	5	131	Arkansas	Sebastian County	FW6	6	49	California	Modoc County
W9	5	133	Arkansas	Sevier County	FW6	6	51	California	Mono County
W9	5	135	Arkansas	Sharp County	FW1	6	53	California	Monterey County
W9	5	137	Arkansas	Stone County	FW6	6	55	California	Napa County
W9	5	139	Arkansas	Union County	FW6	6	57	California	Nevada County
W9	5	141	Arkansas	Van Buren County	FW1	6	59	California	Orange County
W9	5	143	Arkansas	Washington County	FW4	6	61	California	Placer County
W9	5	145	Arkansas	White County	FW6	6	63	California	Plumas County
W9	5	147	Arkansas	Woodruff County	FW1	6	65	California	Riverside County
W9	5	149	Arkansas	Yell County	FW4	6	67	California	Sacramento County
FW6	6	1	California	Alameda County	FW1	6	69	California	San Benito County
FW6	6	3	California	Alpine County	FW1	6	71	California	San Bernardino County
FW6	6	5	California	Amador County	FW2	6	73	California	San Diego County
FW6	6	7	California	Butte County	FW6	6	75	California	San Francisco County
FW6	6	9	California	Calaveras County	FW5	6	77	California	San Joaquin County
FW6	6	11	California	Colusa County	FW6	6	79	California	San Luis Obispo County
FW6	6	13	California	Contra Costa County	FW6	6	81	California	San Mateo County
FW6	6	15	California	Del Norte County	FW6	6	83	California	Santa Barbara County
FW4	6	17	California	El Dorado County	FW6	6	85	California	Santa Clara County
FW5	6	19	California	Fresno County	FW1	6	87	California	Santa Cruz County
FW6	6	21	California	Glenn County	FW6	6	89	California	Shasta County
FW6	6	23	California	Humboldt County	FW6	6	91	California	Sierra County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
FW6	6	93	California	Siskiyou County	R1	8	45	Colorado	Garfield County
FW4	6	95	California	Solano County	R1	8	47	Colorado	Gilpin County
FW6	6	97	California	Sonoma County	R1	8	49	Colorado	Grand County
FW5	6	99	California	Stanislaus County	R1	8	51	Colorado	Gunnison County
FW4	6	101	California	Sutter County	R1	8	53	Colorado	Hinsdale County
FW6	6	103	California	Tehama County	R1	8	55	Colorado	Huerfano County
FW6	6	105	California	Trinity County	R1	8	57	Colorado	Jackson County
FW5	6	107	California	Tulare County	R1	8	59	Colorado	Jefferson County
FW6	6	109	California	Tuolumne County	R1	8	61	Colorado	Kiowa County
FW3	6	111	California	Ventura County	R1	8	63	Colorado	Kit Carson County
FW4	6	113	California	Yolo County	R1	8	65	Colorado	Lake County
FW6	6	115	California	Yuba County	R1	8	67	Colorado	La Plata County
R1	8	1	Colorado	Adams County	R1	8	69	Colorado	Larimer County
R1	8	3	Colorado	Alamosa County	R1	8	71	Colorado	Las Animas County
R1	8	5	Colorado	Arapahoe County	R1	8	73	Colorado	Lincoln County
R1	8	7	Colorado	Archuleta County	R1	8	75	Colorado	Logan County
R1	8	9	Colorado	Baca County	R1	8	77	Colorado	Mesa County
R1	8	11	Colorado	Bent County	R1	8	79	Colorado	Mineral County
R1	8	13	Colorado	Boulder County	R1	8	81	Colorado	Moffat County
R1	8	15	Colorado	Chaffee County	R1	8	83	Colorado	Montezuma County
R1	8	17	Colorado	Cheyenne County	R1	8	85	Colorado	Montrose County
R1	8	19	Colorado	Clear Creek County	R1	8	87	Colorado	Morgan County
R1	8	21	Colorado	Conejos County	R1	8	89	Colorado	Otero County
R1	8	23	Colorado	Costilla County	R1	8	91	Colorado	Ouray County
R1	8	25	Colorado	Crowley County	R1	8	93	Colorado	Park County
R1	8	27	Colorado	Custer County	R1	8	95	Colorado	Phillips County
R1	8	29	Colorado	Delta County	R1	8	97	Colorado	Pitkin County
R1	8	31	Colorado	Denver County	R1	8	99	Colorado	Prowers County
R1	8	33	Colorado	Dolores County	R1	8	101	Colorado	Pueblo County
R1	8	35	Colorado	Douglas County	R1	8	103	Colorado	Rio Blanco County
R1	8	37	Colorado	Eagle County	R1	8	105	Colorado	Rio Grande County
R1	8	39	Colorado	Elbert County	R1	8	107	Colorado	Routt County
R1	8	41	Colorado	El Paso County	R1	8	109	Colorado	Saguache County
R1	8	43	Colorado	Fremont County	R1	8	111	Colorado	San Juan County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County
R1	8	113	Colorado	San Miguel County
R1	8	115	Colorado	Sedgwick County
R1	8	117	Colorado	Summit County
R1	8	119	Colorado	Teller County
R1	8	121	Colorado	Washington County
R1	8	123	Colorado	Weld County
R1	8	125	Colorado	Yuma County
M1	9	1	Connecticut	Fairfield County
NE2	9	3	Connecticut	Hartford County
M1	9	5	Connecticut	Litchfield County
NE2	9	7	Connecticut	Middlesex County
NE2	9	9	Connecticut	New Haven County
NE2	9	11	Connecticut	New London County
NE2	9	13	Connecticut	Tolland County
NE2	9	15	Connecticut	Windham County
M3	10	1	Delaware	Kent County
M3	10	3	Delaware	New Castle County
M9	10	5	Delaware	Sussex County
M4	11	1	District of Columbia	District of Columbia
S13	12	1	Florida	Alachua County
S13	12	3	Florida	Baker County
S13	12	5	Florida	Bay County
S13	12	7	Florida	Bradford County
S13	12	9	Florida	Brevard County
S13	12	11	Florida	Broward County
S13	12	13	Florida	Calhoun County
S13	12	15	Florida	Charlotte County
S13	12	17	Florida	Citrus County
S13	12	19	Florida	Clay County
S13	12	21	Florida	Collier County
S13	12	23	Florida	Columbia County
S13	12	25	Florida	Dade County
S13	12	27	Florida	De Soto County
S13	12	29	Florida	Dixie County

Model Region	FIPS State	FIPS County	State	County
S13	12	31	Florida	Duval County
S13	12	33	Florida	Escambia County
S13	12	35	Florida	Flagler County
S13	12	37	Florida	Franklin County
S13	12	39	Florida	Gadsden County
S13	12	41	Florida	Gilchrist County
S13	12	43	Florida	Glades County
S13	12	45	Florida	Gulf County
S13	12	47	Florida	Hamilton County
S13	12	49	Florida	Hardee County
S13	12	51	Florida	Hendry County
S13	12	53	Florida	Hernando County
S13	12	55	Florida	Highlands County
S13	12	57	Florida	Hillsborough County
S13	12	59	Florida	Holmes County
S13	12	61	Florida	Indian River County
S13	12	63	Florida	Jackson County
S13	12	65	Florida	Jefferson County
S13	12	67	Florida	Lafayette County
S13	12	69	Florida	Lake County
S13	12	71	Florida	Lee County
S13	12	73	Florida	Leon County
S13	12	75	Florida	Levy County
S13	12	77	Florida	Liberty County
S13	12	79	Florida	Madison County
S13	12	81	Florida	Manatee County
S13	12	83	Florida	Marion County
S13	12	85	Florida	Martin County
S13	12	87	Florida	Monroe County
S13	12	89	Florida	Nassau County
S13	12	91	Florida	Okaloosa County
S13	12	93	Florida	Okeechobee County
S13	12	95	Florida	Orange County
S13	12	97	Florida	Osceola County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S13	12	99	Florida	Palm Beach County	S4	13	33	Georgia	Burke County
S13	12	101	Florida	Pasco County	S4	13	35	Georgia	Butts County
S13	12	103	Florida	Pinellas County	S4	13	37	Georgia	Calhoun County
S13	12	105	Florida	Polk County	S4	13	39	Georgia	Camden County
S13	12	107	Florida	Putnam County	S4	13	43	Georgia	Candler County
S13	12	109	Florida	St Johns County	S4	13	45	Georgia	Carroll County
S13	12	111	Florida	St Lucie County	S4	13	47	Georgia	Catoosa County
S13	12	113	Florida	Santa Rosa County	S4	13	49	Georgia	Charlton County
S13	12	115	Florida	Sarasota County	S4	13	51	Georgia	Chatham County
S13	12	117	Florida	Seminole County	S4	13	53	Georgia	Chattahoochee County
S13	12	119	Florida	Sumter County	S4	13	55	Georgia	Chattooga County
S13	12	121	Florida	Suwannee County	S1	13	57	Georgia	Cherokee County
S13	12	123	Florida	Taylor County	S4	13	59	Georgia	Clarke County
S13	12	125	Florida	Union County	S4	13	61	Georgia	Clay County
S13	12	127	Florida	Volusia County	S1	13	63	Georgia	Clayton County
S13	12	129	Florida	Wakulla County	S4	13	65	Georgia	Clinch County
S13	12	131	Florida	Walton County	S1	13	67	Georgia	Cobb County
S13	12	133	Florida	Washington County	S4	13	69	Georgia	Coffee County
S4	13	1	Georgia	Appling County	S4	13	71	Georgia	Colquitt County
S4	13	3	Georgia	Atkinson County	S4	13	73	Georgia	Columbia County
S4	13	5	Georgia	Bacon County	S4	13	75	Georgia	Cook County
S4	13	7	Georgia	Baker County	S1	13	77	Georgia	Coweta County
S4	13	9	Georgia	Baldwin County	S4	13	79	Georgia	Crawford County
S4	13	11	Georgia	Banks County	S4	13	81	Georgia	Crisp County
S4	13	13	Georgia	Barrow County	S4	13	83	Georgia	Dade County
S4	13	15	Georgia	Bartow County	S4	13	85	Georgia	Dawson County
S4	13	17	Georgia	Ben Hill County	S4	13	87	Georgia	Decatur County
S4	13	19	Georgia	Berrien County	S1	13	89	Georgia	De Kalb County
S4	13	21	Georgia	Bibb County	S4	13	91	Georgia	Dodge County
S4	13	23	Georgia	Bleckley County	S4	13	93	Georgia	Dooly County
S4	13	25	Georgia	Brantley County	S4	13	95	Georgia	Dougherty County
S4	13	27	Georgia	Brooks County	S1	13	97	Georgia	Douglas County
S4	13	29	Georgia	Bryan County	S4	13	99	Georgia	Early County
S4	13	31	Georgia	Bulloch County	S4	13	101	Georgia	Echols County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S4	13	103	Georgia	Effingham County	S4	13	171	Georgia	Lamar County
S4	13	105	Georgia	Elbert County	S4	13	173	Georgia	Lanier County
S4	13	107	Georgia	Emanuel County	S4	13	175	Georgia	Laurens County
S4	13	109	Georgia	Evans County	S4	13	177	Georgia	Lee County
S4	13	111	Georgia	Fannin County	S4	13	179	Georgia	Liberty County
S1	13	113	Georgia	Fayette County	S4	13	181	Georgia	Lincoln County
S4	13	115	Georgia	Floyd County	S4	13	183	Georgia	Long County
S1	13	117	Georgia	Forsyth County	S4	13	185	Georgia	Lowndes County
S4	13	119	Georgia	Franklin County	S4	13	187	Georgia	Lumpkin County
S1	13	121	Georgia	Fulton County	S4	13	189	Georgia	Mc Duffie County
S4	13	123	Georgia	Gilmer County	S4	13	191	Georgia	Mc Intosh County
S4	13	125	Georgia	Glascock County	S4	13	193	Georgia	Macon County
S4	13	127	Georgia	Glynn County	S4	13	195	Georgia	Madison County
S4	13	129	Georgia	Gordon County	S4	13	197	Georgia	Marion County
S4	13	131	Georgia	Grady County	S4	13	199	Georgia	Meriwether County
S4	13	133	Georgia	Greene County	S4	13	201	Georgia	Miller County
S1	13	135	Georgia	Gwinnett County	S4	13	205	Georgia	Mitchell County
S4	13	137	Georgia	Habersham County	S4	13	207	Georgia	Monroe County
S4	13	139	Georgia	Hall County	S4	13	209	Georgia	Montgomery County
S4	13	141	Georgia	Hancock County	S4	13	211	Georgia	Morgan County
S4	13	143	Georgia	Haralson County	S4	13	213	Georgia	Murray County
S4	13	145	Georgia	Harris County	S4	13	215	Georgia	Muscogee County
S4	13	147	Georgia	Hart County	S4	13	217	Georgia	Newton County
S4	13	149	Georgia	Heard County	S4	13	219	Georgia	Oconee County
S1	13	151	Georgia	Henry County	S4	13	221	Georgia	Oglethorpe County
S4	13	153	Georgia	Houston County	S1	13	223	Georgia	Paulding County
S4	13	155	Georgia	Irwin County	S4	13	225	Georgia	Peach County
S4	13	157	Georgia	Jackson County	S4	13	227	Georgia	Pickens County
S4	13	159	Georgia	Jasper County	S4	13	229	Georgia	Pierce County
S4	13	161	Georgia	Jeff Davis County	S4	13	231	Georgia	Pike County
S4	13	163	Georgia	Jefferson County	S4	13	233	Georgia	Polk County
S4	13	165	Georgia	Jenkins County	S4	13	235	Georgia	Pulaski County
S4	13	167	Georgia	Johnson County	S4	13	237	Georgia	Putnam County
S4	13	169	Georgia	Jones County	S4	13	239	Georgia	Quitman County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S4	13	241	Georgia	Rabun County	S4	13	309	Georgia	Wheeler County
S4	13	243	Georgia	Randolph County	S4	13	311	Georgia	White County
S4	13	245	Georgia	Richmond County	S4	13	313	Georgia	Whitfield County
S1	13	247	Georgia	Rockdale County	S4	13	315	Georgia	Wilcox County
S4	13	249	Georgia	Schley County	S4	13	317	Georgia	Wilkes County
S4	13	251	Georgia	Screven County	S4	13	319	Georgia	Wilkinson County
S4	13	253	Georgia	Seminole County	S4	13	321	Georgia	Worth County
S4	13	255	Georgia	Spalding County	R7	16	1	Idaho	Ada County
S4	13	257	Georgia	Stephens County	R7	16	3	Idaho	Adams County
S4	13	259	Georgia	Stewart County	R7	16	5	Idaho	Bannock County
S4	13	261	Georgia	Sumter County	R7	16	7	Idaho	Bear Lake County
S4	13	263	Georgia	Talbot County	R7	16	9	Idaho	Benewah County
S4	13	265	Georgia	Taliaferro County	R7	16	11	Idaho	Bingham County
S4	13	267	Georgia	Tattnall County	R7	16	13	Idaho	Blaine County
S4	13	269	Georgia	Taylor County	R7	16	15	Idaho	Boise County
S4	13	271	Georgia	Telfair County	R7	16	17	Idaho	Bonner County
S4	13	273	Georgia	Terrell County	R7	16	19	Idaho	Bonneville County
S4	13	275	Georgia	Thomas County	R7	16	21	Idaho	Boundary County
S4	13	277	Georgia	Tift County	R7	16	23	Idaho	Butte County
S4	13	279	Georgia	Toombs County	R7	16	25	Idaho	Camas County
S4	13	281	Georgia	Towns County	R7	16	27	Idaho	Canyon County
S4	13	283	Georgia	Treutlen County	R7	16	29	Idaho	Caribou County
S4	13	285	Georgia	Troup County	R7	16	31	Idaho	Cassia County
S4	13	287	Georgia	Turner County	R7	16	33	Idaho	Clark County
S4	13	289	Georgia	Twiggs County	R7	16	35	Idaho	Clearwater County
S4	13	291	Georgia	Union County	R7	16	37	Idaho	Custer County
S4	13	293	Georgia	Upson County	R7	16	39	Idaho	Elmore County
S4	13	295	Georgia	Walker County	R7	16	41	Idaho	Franklin County
S4	13	297	Georgia	Walton County	R7	16	43	Idaho	Fremont County
S4	13	299	Georgia	Ware County	R7	16	45	Idaho	Gem County
S4	13	301	Georgia	Warren County	R7	16	47	Idaho	Gooding County
S4	13	303	Georgia	Washington County	R7	16	49	Idaho	Idaho County
S4	13	305	Georgia	Wayne County	R7	16	51	Idaho	Jefferson County
S4	13	307	Georgia	Webster County	R7	16	53	Idaho	Jerome County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R7	16	55	Idaho	Kootenai County	G7	17	35	Illinois	Cumberland County
R7	16	57	Idaho	Latah County	G7	17	37	Illinois	De Kalb County
R7	16	59	Idaho	Lemhi County	G7	17	39	Illinois	De Witt County
R7	16	61	Idaho	Lewis County	G7	17	41	Illinois	Douglas County
R7	16	63	Idaho	Lincoln County	G1	17	43	Illinois	Du Page County
R7	16	65	Idaho	Madison County	G7	17	45	Illinois	Edgar County
R7	16	67	Idaho	Minidoka County	G7	17	47	Illinois	Edwards County
R7	16	69	Idaho	Nez perce County	G7	17	49	Illinois	Effingham County
R7	16	71	Idaho	Oneida County	G7	17	51	Illinois	Fayette County
R7	16	73	Idaho	Owyhee County	G7	17	53	Illinois	Ford County
R7	16	75	Idaho	Payette County	G7	17	55	Illinois	Franklin County
R7	16	77	Idaho	Power County	G7	17	57	Illinois	Fulton County
R7	16	79	Idaho	Shoshone County	G7	17	59	Illinois	Gallatin County
R7	16	81	Idaho	Teton County	G7	17	61	Illinois	Greene County
R7	16	83	Idaho	Twin Falls County	G1	17	63	Illinois	Grundy County
R7	16	85	Idaho	Valley County	G7	17	65	Illinois	Hamilton County
R7	16	87	Idaho	Washington County	G7	17	67	Illinois	Hancock County
G7	17	1	Illinois	Adams County	G7	17	69	Illinois	Hardin County
G7	17	3	Illinois	Alexander County	G7	17	71	Illinois	Henderson County
G7	17	5	Illinois	Bond County	G7	17	73	Illinois	Henry County
G7	17	7	Illinois	Boone County	G7	17	75	Illinois	Iroquois County
G7	17	9	Illinois	Brown County	G7	17	77	Illinois	Jackson County
G7	17	11	Illinois	Bureau County	G7	17	79	Illinois	Jasper County
G7	17	13	Illinois	Calhoun County	G7	17	81	Illinois	Jefferson County
G7	17	15	Illinois	Carroll County	G7	17	83	Illinois	Jersey County
G7	17	17	Illinois	Cass County	G7	17	85	Illinois	Jo Davies County
G7	17	19	Illinois	Champaign County	G7	17	87	Illinois	Johnson County
G7	17	21	Illinois	Christian County	G1	17	89	Illinois	Kane County
G7	17	23	Illinois	Clark County	G7	17	91	Illinois	Kankakee County
G7	17	25	Illinois	Clay County	G1	17	93	Illinois	Kendall County
G7	17	27	Illinois	Clinton County	G7	17	95	Illinois	Knox County
G7	17	29	Illinois	Coles County	G1	17	97	Illinois	Lake County
G1	17	31	Illinois	Cook County	G7	17	99	Illinois	La Salle County
G7	17	33	Illinois	Crawford County	G7	17	101	Illinois	Lawrence County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G7	17	103	Illinois	Lee County	G7	17	171	Illinois	Scott County
G7	17	105	Illinois	Livingston County	G7	17	173	Illinois	Shelby County
G7	17	107	Illinois	Logan County	G7	17	175	Illinois	Stark County
G7	17	109	Illinois	McDonough County	G7	17	177	Illinois	Stephenson County
G1	17	111	Illinois	McHenry County	G7	17	179	Illinois	Tazewell County
G7	17	113	Illinois	McLean County	G7	17	181	Illinois	Union County
G7	17	115	Illinois	Macon County	G7	17	183	Illinois	Vermilion County
G7	17	117	Illinois	Macoupin County	G7	17	185	Illinois	Wabash County
G6	17	119	Illinois	Madison County	G7	17	187	Illinois	Warren County
G7	17	121	Illinois	Marion County	G7	17	189	Illinois	Washington County
G7	17	123	Illinois	Marshall County	G7	17	191	Illinois	Wayne County
G7	17	125	Illinois	Mason County	G7	17	193	Illinois	White County
G7	17	127	Illinois	Massac County	G7	17	195	Illinois	Whiteside County
G7	17	129	Illinois	Menard County	G1	17	197	Illinois	Will County
G7	17	131	Illinois	Mercer County	G7	17	199	Illinois	Williamson County
G6	17	133	Illinois	Monroe County	G7	17	201	Illinois	Winnebago County
G7	17	135	Illinois	Montgomery County	G7	17	203	Illinois	Woodford County
G7	17	137	Illinois	Morgan County	G8	18	1	Indiana	Adams County
G7	17	139	Illinois	Moultrie County	G8	18	3	Indiana	Allen County
G7	17	141	Illinois	Ogle County	G8	18	5	Indiana	Bartholomew County
G7	17	143	Illinois	Peoria County	G8	18	7	Indiana	Benton County
G7	17	145	Illinois	Perry County	G8	18	9	Indiana	Blackford County
G7	17	147	Illinois	Piatt County	G8	18	11	Indiana	Boone County
G7	17	149	Illinois	Pike County	G8	18	13	Indiana	Brown County
G7	17	151	Illinois	Pope County	G8	18	15	Indiana	Carroll County
G7	17	153	Illinois	Pulaski County	G8	18	17	Indiana	Cass County
G7	17	155	Illinois	Putnam County	S2	18	19	Indiana	Clark County
G7	17	157	Illinois	Randolph County	G8	18	21	Indiana	Clay County
G7	17	159	Illinois	Richland County	G8	18	23	Indiana	Clinton County
G7	17	161	Illinois	Rock Island County	G8	18	25	Indiana	Crawford County
G6	17	163	Illinois	St Clair County	G8	18	27	Indiana	Daviess County
G7	17	165	Illinois	Saline County	G8	18	29	Indiana	Dearborn County
G7	17	167	Illinois	Sangamon County	G8	18	31	Indiana	Decatur County
G7	17	169	Illinois	Schuylerville County	G8	18	33	Indiana	De Kalb County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G8	18	35	Indiana	Delaware County	G8	18	103	Indiana	Miami County
G8	18	37	Indiana	Dubois County	G8	18	105	Indiana	Monroe County
G8	18	39	Indiana	Elkhart County	G8	18	107	Indiana	Montgomery County
G8	18	41	Indiana	Fayette County	G8	18	109	Indiana	Morgan County
S2	18	43	Indiana	Floyd County	G8	18	111	Indiana	Newton County
G8	18	45	Indiana	Fountain County	G8	18	113	Indiana	Noble County
G8	18	47	Indiana	Franklin County	G8	18	115	Indiana	Ohio County
G8	18	49	Indiana	Fulton County	G8	18	117	Indiana	Orange County
G8	18	51	Indiana	Gibson County	G8	18	119	Indiana	Owen County
G8	18	53	Indiana	Grant County	G8	18	121	Indiana	Parke County
G8	18	55	Indiana	Greene County	G8	18	123	Indiana	Perry County
G8	18	57	Indiana	Hamilton County	G8	18	125	Indiana	Pike County
G8	18	59	Indiana	Hancock County	G1	18	127	Indiana	Porter County
G8	18	61	Indiana	Harrison County	G8	18	129	Indiana	Posey County
G8	18	63	Indiana	Hendricks County	G8	18	131	Indiana	Pulaski County
G8	18	65	Indiana	Henry County	G8	18	133	Indiana	Putnam County
G8	18	67	Indiana	Howard County	G8	18	135	Indiana	Randolph County
G8	18	69	Indiana	Huntington County	G8	18	137	Indiana	Ripley County
G8	18	71	Indiana	Jackson County	G8	18	139	Indiana	Rush County
G8	18	73	Indiana	Jasper County	G8	18	141	Indiana	St Joseph County
G8	18	75	Indiana	Jay County	G8	18	143	Indiana	Scott County
G8	18	77	Indiana	Jefferson County	G8	18	145	Indiana	Shelby County
G8	18	79	Indiana	Jennings County	G8	18	147	Indiana	Spencer County
G8	18	81	Indiana	Johnson County	G8	18	149	Indiana	Starke County
G8	18	83	Indiana	Knox County	G8	18	151	Indiana	Steuben County
G8	18	85	Indiana	Kosciusko County	G8	18	153	Indiana	Sullivan County
G8	18	87	Indiana	Lagrange County	G8	18	155	Indiana	Switzerland County
G1	18	89	Indiana	Lake County	G8	18	157	Indiana	Tippecanoe County
G8	18	91	Indiana	La Porte County	G8	18	159	Indiana	Tipton County
G8	18	93	Indiana	Lawrence County	G8	18	161	Indiana	Union County
G8	18	95	Indiana	Madison County	G8	18	163	Indiana	Vanderburgh County
G8	18	97	Indiana	Marion County	G8	18	165	Indiana	Vermillion County
G8	18	99	Indiana	Marshall County	G8	18	167	Indiana	Vigo County
G8	18	101	Indiana	Martin County	G8	18	169	Indiana	Wabash County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G8	18	171	Indiana	Warren County	PL4	19	55	Iowa	Delaware County
G8	18	173	Indiana	Warrick County	PL4	19	57	Iowa	Des Moines County
G8	18	175	Indiana	Washington County	PL4	19	59	Iowa	Dickinson County
G8	18	177	Indiana	Wayne County	PL4	19	61	Iowa	Dubuque County
G8	18	179	Indiana	Wells County	PL4	19	63	Iowa	Emmet County
G8	18	181	Indiana	White County	PL4	19	65	Iowa	Fayette County
G8	18	183	Indiana	Whitley County	PL4	19	67	Iowa	Floyd County
PL4	19	1	Iowa	Adair County	PL4	19	69	Iowa	Franklin County
PL4	19	3	Iowa	Adams County	PL4	19	71	Iowa	Fremont County
PL4	19	5	Iowa	Allamakee County	PL4	19	73	Iowa	Greene County
PL4	19	7	Iowa	Appanoose County	PL4	19	75	Iowa	Grundy County
PL4	19	9	Iowa	Audubon County	PL4	19	77	Iowa	Guthrie County
PL4	19	11	Iowa	Benton County	PL4	19	79	Iowa	Hamilton County
PL4	19	13	Iowa	Black Hawk County	PL4	19	81	Iowa	Hancock County
PL4	19	15	Iowa	Boone County	PL4	19	83	Iowa	Hardin County
PL4	19	17	Iowa	Bremer County	PL4	19	85	Iowa	Harrison County
PL4	19	19	Iowa	Buchanan County	PL4	19	87	Iowa	Henry County
PL4	19	21	Iowa	Buena Vista County	PL4	19	89	Iowa	Howard County
PL4	19	23	Iowa	Butler County	PL4	19	91	Iowa	Humboldt County
PL4	19	25	Iowa	Calhoun County	PL4	19	93	Iowa	Ida County
PL4	19	27	Iowa	Carroll County	PL4	19	95	Iowa	Iowa County
PL4	19	29	Iowa	Cass County	PL4	19	97	Iowa	Jackson County
PL4	19	31	Iowa	Cedar County	PL4	19	99	Iowa	Jasper County
PL4	19	33	Iowa	Cerro Gordo County	PL4	19	101	Iowa	Jefferson County
PL4	19	35	Iowa	Cherokee County	PL4	19	103	Iowa	Johnson County
PL4	19	37	Iowa	Chickasaw County	PL4	19	105	Iowa	Jones County
PL4	19	39	Iowa	Clarke County	PL4	19	107	Iowa	Keokuk County
PL4	19	41	Iowa	Clay County	PL4	19	109	Iowa	Kossuth County
PL4	19	43	Iowa	Clayton County	PL4	19	111	Iowa	Lee County
PL4	19	45	Iowa	Clinton County	PL4	19	113	Iowa	Linn County
PL4	19	47	Iowa	Crawford County	PL4	19	115	Iowa	Louisa County
PL4	19	49	Iowa	Dallas County	PL4	19	117	Iowa	Lucas County
PL4	19	51	Iowa	Davis County	PL4	19	119	Iowa	Lyon County
PL4	19	53	Iowa	Decatur County	PL4	19	121	Iowa	Madison County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
PL4	19	123	Iowa	Mahaska County	PL4	19	191	Iowa	Winneshiek County
PL4	19	125	Iowa	Marion County	PL4	19	193	Iowa	Woodbury County
PL4	19	127	Iowa	Marshall County	PL4	19	195	Iowa	Worth County
PL4	19	129	Iowa	Mills County	PL4	19	197	Iowa	Wright County
PL4	19	131	Iowa	Mitchell County	PL2	20	1	Kansas	Allen County
PL4	19	133	Iowa	Monona County	PL2	20	3	Kansas	Anderson County
PL4	19	135	Iowa	Monroe County	PL2	20	5	Kansas	Atchison County
PL4	19	137	Iowa	Montgomery County	PL2	20	7	Kansas	Barber County
PL4	19	139	Iowa	Muscatine County	PL2	20	9	Kansas	Barton County
PL4	19	141	Iowa	O'brien County	PL2	20	11	Kansas	Bourbon County
PL4	19	143	Iowa	Osceola County	PL2	20	13	Kansas	Brown County
PL4	19	145	Iowa	Page County	PL2	20	15	Kansas	Butler County
PL4	19	147	Iowa	Palo Alto County	PL2	20	17	Kansas	Chase County
PL4	19	149	Iowa	Plymouth County	PL2	20	19	Kansas	Chautauqua County
PL4	19	151	Iowa	Pocahontas County	PL2	20	21	Kansas	Cherokee County
PL4	19	153	Iowa	Polk County	PL2	20	23	Kansas	Cheyenne County
PL4	19	155	Iowa	Pottawattamie County	PL2	20	25	Kansas	Clark County
PL4	19	157	Iowa	Poweshiek County	PL2	20	27	Kansas	Clay County
PL4	19	159	Iowa	Ringgold County	PL2	20	29	Kansas	Cloud County
PL4	19	161	Iowa	Sac County	PL2	20	31	Kansas	Coffey County
PL4	19	163	Iowa	Scott County	PL2	20	33	Kansas	Comanche County
PL4	19	165	Iowa	Shelby County	PL2	20	35	Kansas	Cowley County
PL4	19	167	Iowa	Sioux County	PL2	20	37	Kansas	Crawford County
PL4	19	169	Iowa	Story County	PL2	20	39	Kansas	Decatur County
PL4	19	171	Iowa	Tama County	PL2	20	41	Kansas	Dickinson County
PL4	19	173	Iowa	Taylor County	PL2	20	43	Kansas	Doniphan County
PL4	19	175	Iowa	Union County	PL2	20	45	Kansas	Douglas County
PL4	19	177	Iowa	Van Buren County	PL2	20	47	Kansas	Edwards County
PL4	19	179	Iowa	Wapello County	PL2	20	49	Kansas	Elk County
PL4	19	181	Iowa	Warren County	PL2	20	51	Kansas	Ellis County
PL4	19	183	Iowa	Washington County	PL2	20	53	Kansas	Ellsworth County
PL4	19	185	Iowa	Wayne County	PL2	20	55	Kansas	Finney County
PL4	19	187	Iowa	Webster County	PL2	20	57	Kansas	Ford County
PL4	19	189	Iowa	Winnebago County	PL2	20	59	Kansas	Franklin County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
PL2	20	61	Kansas	Geary County	PL2	20	129	Kansas	Morton County
PL2	20	63	Kansas	Gove County	PL2	20	131	Kansas	Nemaha County
PL2	20	65	Kansas	Graham County	PL2	20	133	Kansas	Neosho County
PL2	20	67	Kansas	Grant County	PL2	20	135	Kansas	Ness County
PL2	20	69	Kansas	Gray County	PL2	20	137	Kansas	Norton County
PL2	20	71	Kansas	Greeley County	PL2	20	139	Kansas	Osage County
PL2	20	73	Kansas	Greenwood County	PL2	20	141	Kansas	Osborne County
PL2	20	75	Kansas	Hamilton County	PL2	20	143	Kansas	Ottawa County
PL2	20	77	Kansas	Harper County	PL2	20	145	Kansas	Pawnee County
PL2	20	79	Kansas	Harvey County	PL2	20	147	Kansas	Phillips County
PL2	20	81	Kansas	Haskell County	PL2	20	149	Kansas	Pottawatomie County
PL2	20	83	Kansas	Hodgeman County	PL2	20	151	Kansas	Pratt County
PL2	20	85	Kansas	Jackson County	PL2	20	153	Kansas	Rawlins County
PL2	20	87	Kansas	Jefferson County	PL2	20	155	Kansas	Reno County
PL2	20	89	Kansas	Jewell County	PL2	20	157	Kansas	Republic County
PL2	20	91	Kansas	Johnson County	PL2	20	159	Kansas	Rice County
PL2	20	93	Kansas	Kearney County	PL2	20	161	Kansas	Riley County
PL2	20	95	Kansas	Kingman County	PL2	20	163	Kansas	Rooks County
PL2	20	97	Kansas	Kiowa County	PL2	20	165	Kansas	Rush County
PL2	20	99	Kansas	Labette County	PL2	20	167	Kansas	Russell County
PL2	20	101	Kansas	Lane County	PL2	20	169	Kansas	Saline County
PL2	20	103	Kansas	Leavenworth County	PL2	20	171	Kansas	Scott County
PL2	20	105	Kansas	Lincoln County	PL2	20	173	Kansas	Sedgwick County
PL2	20	107	Kansas	Linn County	PL2	20	175	Kansas	Seward County
PL2	20	109	Kansas	Logan County	PL2	20	177	Kansas	Shawnee County
PL2	20	111	Kansas	Lyon County	PL2	20	179	Kansas	Sheridan County
PL2	20	113	Kansas	Mc Pherson County	PL2	20	181	Kansas	Sherman County
PL2	20	115	Kansas	Marion County	PL2	20	183	Kansas	Smith County
PL2	20	117	Kansas	Marshall County	PL2	20	185	Kansas	Stafford County
PL2	20	119	Kansas	Meade County	PL2	20	187	Kansas	Stanton County
PL2	20	121	Kansas	Miami County	PL2	20	189	Kansas	Stevens County
PL2	20	123	Kansas	Mitchell County	PL2	20	191	Kansas	Sumner County
PL2	20	125	Kansas	Montgomery County	PL2	20	193	Kansas	Thomas County
PL2	20	127	Kansas	Morris County	PL2	20	195	Kansas	Trego County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
PL2	20	197	Kansas	Wabaunsee County	S3	21	55	Kentucky	Crittenden County
PL2	20	199	Kansas	Wallace County	S3	21	57	Kentucky	Cumberland County
PL2	20	201	Kansas	Washington County	S3	21	59	Kentucky	Daviess County
PL2	20	203	Kansas	Wichita County	S3	21	61	Kentucky	Edmonson County
PL2	20	205	Kansas	Wilson County	S3	21	63	Kentucky	Elliott County
PL2	20	207	Kansas	Woodson County	S3	21	65	Kentucky	Estill County
PL2	20	209	Kansas	Wyandotte County	S3	21	67	Kentucky	Fayette County
S3	21	1	Kentucky	Adair County	S3	21	69	Kentucky	Fleming County
S3	21	3	Kentucky	Allen County	S3	21	71	Kentucky	Floyd County
S3	21	5	Kentucky	Anderson County	S3	21	73	Kentucky	Franklin County
S3	21	7	Kentucky	Ballard County	S3	21	75	Kentucky	Fulton County
S3	21	9	Kentucky	Barren County	S3	21	77	Kentucky	Gallatin County
S3	21	11	Kentucky	Bath County	S3	21	79	Kentucky	Garrard County
S3	21	13	Kentucky	Bell County	S3	21	81	Kentucky	Grant County
G5	21	15	Kentucky	Boone County	S3	21	83	Kentucky	Graves County
S3	21	17	Kentucky	Bourbon County	S3	21	85	Kentucky	Grayson County
M5	21	19	Kentucky	Boyd County	S3	21	87	Kentucky	Green County
S3	21	21	Kentucky	Boyle County	M5	21	89	Kentucky	Greenup County
S3	21	23	Kentucky	Bracken County	S3	21	91	Kentucky	Hancock County
S3	21	25	Kentucky	Breathitt County	S3	21	93	Kentucky	Hardin County
S3	21	27	Kentucky	Breckinridge County	S3	21	95	Kentucky	Harlan County
S2	21	29	Kentucky	Bullitt County	S3	21	97	Kentucky	Harrison County
S3	21	31	Kentucky	Butler County	S3	21	99	Kentucky	Hart County
S3	21	33	Kentucky	Caldwell County	S3	21	101	Kentucky	Henderson County
S3	21	35	Kentucky	Calloway County	S3	21	103	Kentucky	Henry County
G5	21	37	Kentucky	Campbell County	S3	21	105	Kentucky	Hickman County
S3	21	39	Kentucky	Carlisle County	S3	21	107	Kentucky	Hopkins County
S3	21	41	Kentucky	Carroll County	S3	21	109	Kentucky	Jackson County
S3	21	43	Kentucky	Carter County	S2	21	111	Kentucky	Jefferson County
S3	21	45	Kentucky	Casey County	S3	21	113	Kentucky	Jessamine County
S3	21	47	Kentucky	Christian County	S3	21	115	Kentucky	Johnson County
S3	21	49	Kentucky	Clark County	G5	21	117	Kentucky	Kenton County
S3	21	51	Kentucky	Clay County	S3	21	119	Kentucky	Knott County
S3	21	53	Kentucky	Clinton County	S3	21	121	Kentucky	Knox County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S3	21	123	Kentucky	Larue County	S3	21	191	Kentucky	Pendleton County
S3	21	125	Kentucky	Laurel County	S3	21	193	Kentucky	Perry County
S3	21	127	Kentucky	Lawrence County	S3	21	195	Kentucky	Pike County
S3	21	129	Kentucky	Lee County	S3	21	197	Kentucky	Powell County
S3	21	131	Kentucky	Leslie County	S3	21	199	Kentucky	Pulaski County
S3	21	133	Kentucky	Letcher County	S3	21	201	Kentucky	Robertson County
S3	21	135	Kentucky	Lewis County	S3	21	203	Kentucky	Rockcastle County
S3	21	137	Kentucky	Lincoln County	S3	21	205	Kentucky	Rowan County
S3	21	139	Kentucky	Livingston County	S3	21	207	Kentucky	Russell County
S3	21	141	Kentucky	Logan County	S3	21	209	Kentucky	Scott County
S3	21	143	Kentucky	Lyon County	S3	21	211	Kentucky	Shelby County
S3	21	145	Kentucky	Mc Cracken County	S3	21	213	Kentucky	Simpson County
S3	21	147	Kentucky	Mc Creary County	S3	21	215	Kentucky	Spencer County
S3	21	149	Kentucky	Mc Lean County	S3	21	217	Kentucky	Taylor County
S3	21	151	Kentucky	Madison County	S3	21	219	Kentucky	Todd County
S3	21	153	Kentucky	Magoffin County	S3	21	221	Kentucky	Trigg County
S3	21	155	Kentucky	Marion County	S3	21	223	Kentucky	Trimble County
S3	21	157	Kentucky	Marshall County	S3	21	225	Kentucky	Union County
S3	21	159	Kentucky	Martin County	S3	21	227	Kentucky	Warren County
S3	21	161	Kentucky	Mason County	S3	21	229	Kentucky	Washington County
S3	21	163	Kentucky	Meade County	S3	21	231	Kentucky	Wayne County
S3	21	165	Kentucky	Menifee County	S3	21	233	Kentucky	Webster County
S3	21	167	Kentucky	Mercer County	S3	21	235	Kentucky	Whitley County
S3	21	169	Kentucky	Metcalfe County	S3	21	237	Kentucky	Wolfe County
S3	21	171	Kentucky	Monroe County	S3	21	239	Kentucky	Woodford County
S3	21	173	Kentucky	Montgomery County	W6	22	1	Louisiana	Acadia Parish
S3	21	175	Kentucky	Morgan County	W6	22	3	Louisiana	Allen Parish
S3	21	177	Kentucky	Muhlenberg County	W2	22	5	Louisiana	Ascension Parish
S3	21	179	Kentucky	Nelson County	W6	22	7	Louisiana	Assumption Parish
S3	21	181	Kentucky	Nicholas County	W6	22	9	Louisiana	Avoyelles Parish
S3	21	183	Kentucky	Ohio County	W6	22	11	Louisiana	Beauregard Parish
S2	21	185	Kentucky	Oldham County	W6	22	13	Louisiana	Bienville Parish
S3	21	187	Kentucky	Owen County	W6	22	15	Louisiana	Bossier Parish
S3	21	189	Kentucky	Owsley County	W6	22	17	Louisiana	Caddo Parish

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W6	22	19	Louisiana	Calcasieu Parish	W6	22	89	Louisiana	St Charles Parish
W6	22	21	Louisiana	Caldwell Parish	W6	22	91	Louisiana	St Helena Parish
W6	22	23	Louisiana	Cameron Parish	W6	22	93	Louisiana	St James Parish
W6	22	25	Louisiana	Catahoula Parish	W6	22	95	Louisiana	St John The Bapt Paris
W6	22	27	Louisiana	Claiborne Parish	W6	22	97	Louisiana	St Landry Parish
W6	22	29	Louisiana	Concordia Parish	W6	22	99	Louisiana	St Martin Parish
W6	22	31	Louisiana	De Soto Parish	W6	22	101	Louisiana	St Mary Parish
W2	22	33	Louisiana	East Baton Rouge Paris	W6	22	103	Louisiana	St Tammany Parish
W6	22	35	Louisiana	East Carroll Parish	W6	22	85	Louisiana	Sabine Parish
W6	22	37	Louisiana	East Feliciana Parish	W6	22	105	Louisiana	Tangipahoa Parish
W6	22	39	Louisiana	Evangeline Parish	W6	22	107	Louisiana	Tensas Parish
W6	22	41	Louisiana	Franklin Parish	W6	22	109	Louisiana	Terrebonne Parish
W6	22	43	Louisiana	Grant Parish	W6	22	111	Louisiana	Union Parish
W6	22	45	Louisiana	Iberia Parish	W6	22	113	Louisiana	Vermilion Parish
W2	22	47	Louisiana	Iberville Parish	W6	22	115	Louisiana	Vernon Parish
W6	22	49	Louisiana	Jackson Parish	W6	22	117	Louisiana	Washington Parish
W6	22	51	Louisiana	Jefferson Parish	W6	22	119	Louisiana	Webster Parish
W6	22	53	Louisiana	Jefferson Davis Parish	W2	22	121	Louisiana	West Baton Rouge Paris
W6	22	55	Louisiana	Lafayette Parish	W6	22	123	Louisiana	West Carroll Parish
W6	22	57	Louisiana	Lafourche Parish	W6	22	125	Louisiana	West Feliciana Parish
W6	22	59	Louisiana	La Salle Parish	W6	22	127	Louisiana	Winn Parish
W6	22	61	Louisiana	Lincoln Parish	NE7	23	1	Maine	Androscoggin County
W2	22	63	Louisiana	Livingston Parish	NE7	23	3	Maine	Aroostook County
W6	22	65	Louisiana	Madison Parish	NE7	23	5	Maine	Cumberland County
W6	22	67	Louisiana	Morehouse Parish	NE7	23	7	Maine	Franklin County
W6	22	69	Louisiana	Natchitoches Parish	NE7	23	9	Maine	Hancock County
W6	22	71	Louisiana	Orleans Parish	NE7	23	11	Maine	Kennebec County
W6	22	73	Louisiana	Ouachita Parish	NE7	23	13	Maine	Knox County
W6	22	75	Louisiana	Plaquemines Parish	NE7	23	15	Maine	Lincoln County
W2	22	77	Louisiana	Pointe Coupee Parish	NE7	23	17	Maine	Oxford County
W6	22	79	Louisiana	Rapides Parish	NE7	23	19	Maine	Penobscot County
W6	22	81	Louisiana	Red River Parish	NE7	23	21	Maine	Piscataquis County
W6	22	83	Louisiana	Richland Parish	NE7	23	23	Maine	Sagadahoc County
W6	22	87	Louisiana	St Bernard Parish	NE7	23	25	Maine	Somerset County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
NE7	23	27	Maine	Waldo County	NE5	25	15	Massachusetts	Hampshire County
NE7	23	29	Maine	Washington County	NE1	25	17	Massachusetts	Middlesex County
NE7	23	31	Maine	York County	NE1	25	19	Massachusetts	Nantucket County
M12	24	1	Maryland	Allegany County	NE1	25	21	Massachusetts	Norfolk County
M2	24	3	Maryland	Anne Arundel County	NE1	25	23	Massachusetts	Plymouth County
M2	24	510	Maryland	Baltimore City	NE1	25	25	Massachusetts	Suffolk County
M2	24	5	Maryland	Baltimore County	NE1	25	27	Massachusetts	Worcester County
M4	24	9	Maryland	Calvert County	G11	26	1	Michigan	Alcona County
M12	24	11	Maryland	Caroline County	G11	26	3	Michigan	Alger County
M2	24	13	Maryland	Carroll County	G11	26	5	Michigan	Allegan County
M3	24	15	Maryland	Cecil County	G11	26	7	Michigan	Alpena County
M4	24	17	Maryland	Charles County	G11	26	9	Michigan	Antrim County
M12	24	19	Maryland	Dorchester County	G11	26	11	Michigan	Arenac County
M4	24	21	Maryland	Frederick County	G11	26	13	Michigan	Baraga County
M12	24	23	Maryland	Garrett County	G11	26	15	Michigan	Barry County
M2	24	25	Maryland	Harford County	G11	26	17	Michigan	Bay County
M2	24	27	Maryland	Howard County	G11	26	19	Michigan	Benzie County
M12	24	29	Maryland	Kent County	G11	26	21	Michigan	Berrien County
M4	24	31	Maryland	Montgomery County	G11	26	23	Michigan	Branch County
M4	24	33	Maryland	Prince Georges County	G11	26	25	Michigan	Calhoun County
M12	24	35	Maryland	Queen Annes County	G11	26	27	Michigan	Cass County
M12	24	37	Maryland	St Marys County	G11	26	29	Michigan	Charlevoix County
M12	24	39	Maryland	Somerset County	G11	26	31	Michigan	Cheboygan County
M12	24	41	Maryland	Talbot County	G11	26	33	Michigan	Chippewa County
M12	24	43	Maryland	Washington County	G11	26	35	Michigan	Clare County
M12	24	45	Maryland	Wicomico County	G11	26	37	Michigan	Clinton County
M12	24	47	Maryland	Worcester County	G11	26	39	Michigan	Crawford County
NE1	25	1	Massachusetts	Barnstable County	G11	26	41	Michigan	Delta County
NE5	25	3	Massachusetts	Berkshire County	G11	26	43	Michigan	Dickinson County
NE1	25	5	Massachusetts	Bristol County	G11	26	45	Michigan	Eaton County
NE1	25	7	Massachusetts	Dukes County	G11	26	47	Michigan	Emmet County
NE1	25	9	Massachusetts	Essex County	G11	26	49	Michigan	Genesee County
NE5	25	11	Massachusetts	Franklin County	G11	26	51	Michigan	Gladwin County
NE5	25	13	Massachusetts	Hampden County	G11	26	53	Michigan	Gogebic County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G11	26	55	Michigan	Grand Traverse County	G11	26	123	Michigan	Newaygo County
G11	26	57	Michigan	Gratiot County	G11	26	125	Michigan	Oakland County
G11	26	59	Michigan	Hillsdale County	G11	26	127	Michigan	Oceana County
G11	26	61	Michigan	Houghton County	G11	26	129	Michigan	Ogemaw County
G11	26	63	Michigan	Huron County	G11	26	131	Michigan	Ontonagon County
G11	26	65	Michigan	Ingham County	G11	26	133	Michigan	Osceola County
G11	26	67	Michigan	Ionia County	G11	26	135	Michigan	Oscoda County
G11	26	69	Michigan	Iosco County	G11	26	137	Michigan	Otsego County
G11	26	71	Michigan	Iron County	G11	26	139	Michigan	Ottawa County
G11	26	73	Michigan	Isabella County	G11	26	141	Michigan	Presque Isle County
G11	26	75	Michigan	Jackson County	G11	26	143	Michigan	Roscommon County
G11	26	77	Michigan	Kalamazoo County	G11	26	147	Michigan	St Clair County
G11	26	79	Michigan	Kalkaska County	G11	26	149	Michigan	St Joseph County
G11	26	81	Michigan	Kent County	G11	26	145	Michigan	Saginaw County
G11	26	83	Michigan	Keweenaw County	G11	26	151	Michigan	Sanilac County
G11	26	85	Michigan	Lake County	G11	26	153	Michigan	Schoolcraft County
G11	26	87	Michigan	Lapeer County	G11	26	155	Michigan	Shiawassee County
G11	26	89	Michigan	Leelanau County	G11	26	157	Michigan	Tuscola County
G11	26	91	Michigan	Lenawee County	G11	26	159	Michigan	Van Buren County
G11	26	93	Michigan	Livingston County	G11	26	161	Michigan	Washtenaw County
G11	26	95	Michigan	Luce County	G11	26	163	Michigan	Wayne County
G11	26	97	Michigan	Mackinac County	G11	26	165	Michigan	Wexford County
G11	26	99	Michigan	Macomb County	G12	27	1	Minnesota	Aitkin County
G11	26	101	Michigan	Manistee County	G12	27	3	Minnesota	Anoka County
G11	26	103	Michigan	Marquette County	G12	27	5	Minnesota	Becker County
G11	26	105	Michigan	Mason County	G12	27	7	Minnesota	Beltrami County
G11	26	107	Michigan	Mecosta County	G12	27	9	Minnesota	Benton County
G11	26	109	Michigan	Menominee County	G12	27	11	Minnesota	Big Stone County
G11	26	111	Michigan	Midland County	G12	27	13	Minnesota	Blue Earth County
G11	26	113	Michigan	Missaukee County	G12	27	15	Minnesota	Brown County
G11	26	115	Michigan	Monroe County	G12	27	17	Minnesota	Carlton County
G11	26	117	Michigan	Montcalm County	G12	27	19	Minnesota	Carver County
G11	26	119	Michigan	Montmorency County	G12	27	21	Minnesota	Cass County
G3	26	121	Michigan	Muskegon County	G12	27	23	Minnesota	Chippewa County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G12	27	25	Minnesota	Chisago County	G12	27	93	Minnesota	Meeker County
G12	27	27	Minnesota	Clay County	G12	27	95	Minnesota	Mille Lacs County
G12	27	29	Minnesota	Clearwater County	G12	27	97	Minnesota	Morrison County
G12	27	31	Minnesota	Cook County	G12	27	99	Minnesota	Mower County
G12	27	33	Minnesota	Cottonwood County	G12	27	101	Minnesota	Murray County
G12	27	35	Minnesota	Crow Wing County	G12	27	103	Minnesota	Nicollet County
G12	27	37	Minnesota	Dakota County	G12	27	105	Minnesota	Nobles County
G12	27	39	Minnesota	Dodge County	G12	27	107	Minnesota	Norman County
G12	27	41	Minnesota	Douglas County	G12	27	109	Minnesota	Olmsted County
G12	27	43	Minnesota	Faribault County	G12	27	111	Minnesota	Otter Tail County
G12	27	45	Minnesota	Fillmore County	G12	27	113	Minnesota	Pennington County
G12	27	47	Minnesota	Freeborn County	G12	27	115	Minnesota	Pine County
G12	27	49	Minnesota	Goodhue County	G12	27	117	Minnesota	Pipestone County
G12	27	51	Minnesota	Grant County	G12	27	119	Minnesota	Polk County
G12	27	53	Minnesota	Hennepin County	G12	27	121	Minnesota	Pope County
G12	27	55	Minnesota	Houston County	G12	27	123	Minnesota	Ramsey County
G12	27	57	Minnesota	Hubbard County	G12	27	125	Minnesota	Red Lake County
G12	27	59	Minnesota	Isanti County	G12	27	127	Minnesota	Redwood County
G12	27	61	Minnesota	Itasca County	G12	27	129	Minnesota	Renville County
G12	27	63	Minnesota	Jackson County	G12	27	131	Minnesota	Rice County
G12	27	65	Minnesota	Kanabec County	G12	27	133	Minnesota	Rock County
G12	27	67	Minnesota	Kandiyohi County	G12	27	135	Minnesota	Roseau County
G12	27	69	Minnesota	Kittson County	G12	27	137	Minnesota	St Louis County
G12	27	71	Minnesota	Koochiching County	G12	27	139	Minnesota	Scott County
G12	27	73	Minnesota	Lac Qui Parle County	G12	27	141	Minnesota	Sherburne County
G12	27	75	Minnesota	Lake County	G12	27	143	Minnesota	Sibley County
G12	27	77	Minnesota	Lake Of The Woo County	G12	27	145	Minnesota	Stearns County
G12	27	79	Minnesota	Le Sueur County	G12	27	147	Minnesota	Steele County
G12	27	81	Minnesota	Lincoln County	G12	27	149	Minnesota	Stevens County
G12	27	83	Minnesota	Lyon County	G12	27	151	Minnesota	Swift County
G12	27	85	Minnesota	Mc Leod County	G12	27	153	Minnesota	Todd County
G12	27	87	Minnesota	Mahnomen County	G12	27	155	Minnesota	Traverse County
G12	27	89	Minnesota	Marshall County	G12	27	157	Minnesota	Wabasha County
G12	27	91	Minnesota	Martin County	G12	27	159	Minnesota	Wadena County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G12	27	161	Minnesota	Waseca County	S10	28	55	Mississippi	Issaquena County
G12	27	163	Minnesota	Washington County	S10	28	57	Mississippi	Itawamba County
G12	27	165	Minnesota	Watonwan County	S10	28	59	Mississippi	Jackson County
G12	27	167	Minnesota	Wilkin County	S10	28	61	Mississippi	Jasper County
G12	27	169	Minnesota	Winona County	S10	28	63	Mississippi	Jefferson County
G12	27	171	Minnesota	Wright County	S10	28	65	Mississippi	Jefferson Davis County
G12	27	173	Minnesota	Yellow Medicine County	S10	28	67	Mississippi	Jones County
S10	28	1	Mississippi	Adams County	S10	28	69	Mississippi	Kemper County
S10	28	3	Mississippi	Alcorn County	S10	28	71	Mississippi	Lafayette County
S10	28	5	Mississippi	Amite County	S10	28	73	Mississippi	Lamar County
S10	28	7	Mississippi	Attala County	S10	28	75	Mississippi	Lauderdale County
S10	28	9	Mississippi	Benton County	S10	28	77	Mississippi	Lawrence County
S10	28	11	Mississippi	Bolivar County	S10	28	79	Mississippi	Leake County
S10	28	13	Mississippi	Calhoun County	S10	28	81	Mississippi	Lee County
S10	28	15	Mississippi	Carroll County	S10	28	83	Mississippi	Leflore County
S10	28	17	Mississippi	Chickasaw County	S10	28	85	Mississippi	Lincoln County
S10	28	19	Mississippi	Choctaw County	S10	28	87	Mississippi	Lowndes County
S10	28	21	Mississippi	Claiborne County	S10	28	89	Mississippi	Madison County
S10	28	23	Mississippi	Clarke County	S10	28	91	Mississippi	Marion County
S10	28	25	Mississippi	Clay County	S10	28	93	Mississippi	Marshall County
S10	28	27	Mississippi	Coahoma County	S10	28	95	Mississippi	Monroe County
S10	28	29	Mississippi	Copiah County	S10	28	97	Mississippi	Montgomery County
S10	28	31	Mississippi	Covington County	S10	28	99	Mississippi	Neshoba County
S10	28	33	Mississippi	De Soto County	S10	28	101	Mississippi	Newton County
S10	28	35	Mississippi	Forrest County	S10	28	103	Mississippi	Noxubee County
S10	28	37	Mississippi	Franklin County	S10	28	105	Mississippi	Oktibbeha County
S10	28	39	Mississippi	George County	S10	28	107	Mississippi	Panola County
S10	28	41	Mississippi	Greene County	S10	28	109	Mississippi	Pearl River County
S10	28	43	Mississippi	Grenada County	S10	28	111	Mississippi	Perry County
S10	28	45	Mississippi	Hancock County	S10	28	113	Mississippi	Pike County
S10	28	47	Mississippi	Harrison County	S10	28	115	Mississippi	Pontotoc County
S10	28	49	Mississippi	Hinds County	S10	28	117	Mississippi	Prentiss County
S10	28	51	Mississippi	Holmes County	S10	28	119	Mississippi	Quitman County
S10	28	53	Mississippi	Humphreys County	S10	28	121	Mississippi	Rankin County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S10	28	123	Mississippi	Scott County	PL1	29	27	Missouri	Callaway County
S10	28	125	Mississippi	Sharkey County	PL1	29	29	Missouri	Camden County
S10	28	127	Mississippi	Simpson County	PL1	29	31	Missouri	Cape Girardeau County
S10	28	129	Mississippi	Smith County	PL1	29	33	Missouri	Carroll County
S10	28	131	Mississippi	Stone County	PL1	29	35	Missouri	Carter County
S10	28	133	Mississippi	Sunflower County	PL1	29	37	Missouri	Cass County
S10	28	135	Mississippi	Tallahatchie County	PL1	29	39	Missouri	Cedar County
S10	28	137	Mississippi	Tate County	PL1	29	41	Missouri	Chariton County
S10	28	139	Mississippi	Tippah County	PL1	29	43	Missouri	Christian County
S10	28	141	Mississippi	Tishomingo County	PL1	29	45	Missouri	Clark County
S10	28	143	Mississippi	Tunica County	PL1	29	47	Missouri	Clay County
S10	28	145	Mississippi	Union County	PL1	29	49	Missouri	Clinton County
S10	28	147	Mississippi	Walthall County	PL1	29	51	Missouri	Cole County
S10	28	149	Mississippi	Warren County	PL1	29	53	Missouri	Cooper County
S10	28	151	Mississippi	Washington County	PL1	29	55	Missouri	Crawford County
S10	28	153	Mississippi	Wayne County	PL1	29	57	Missouri	Dade County
S10	28	155	Mississippi	Webster County	PL1	29	59	Missouri	Dallas County
S10	28	157	Mississippi	Wilkinson County	PL1	29	61	Missouri	Daviess County
S10	28	159	Mississippi	Winston County	PL1	29	63	Missouri	De Kalb County
S10	28	161	Mississippi	Yalobusha County	PL1	29	65	Missouri	Dent County
S10	28	163	Mississippi	Yazoo County	PL1	29	67	Missouri	Douglas County
PL1	29	1	Missouri	Adair County	PL1	29	69	Missouri	Dunklin County
PL1	29	3	Missouri	Andrew County	G6	29	71	Missouri	Franklin County
PL1	29	5	Missouri	Atchison County	PL1	29	73	Missouri	Gasconade County
PL1	29	7	Missouri	Audrain County	PL1	29	75	Missouri	Gentry County
PL1	29	9	Missouri	Barry County	PL1	29	77	Missouri	Greene County
PL1	29	11	Missouri	Barton County	PL1	29	79	Missouri	Grundy County
PL1	29	13	Missouri	Bates County	PL1	29	81	Missouri	Harrison County
PL1	29	15	Missouri	Benton County	PL1	29	83	Missouri	Henry County
PL1	29	17	Missouri	Bollinger County	PL1	29	85	Missouri	Hickory County
PL1	29	19	Missouri	Boone County	PL1	29	87	Missouri	Holt County
PL1	29	21	Missouri	Buchanan County	PL1	29	89	Missouri	Howard County
PL1	29	23	Missouri	Butler County	PL1	29	91	Missouri	Howell County
PL1	29	25	Missouri	Caldwell County	PL1	29	93	Missouri	Iron County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
PL1	29	95	Missouri	Jackson County	PL1	29	163	Missouri	Pike County
PL1	29	97	Missouri	Jasper County	PL1	29	165	Missouri	Platte County
G6	29	99	Missouri	Jefferson County	PL1	29	167	Missouri	Polk County
PL1	29	101	Missouri	Johnson County	PL1	29	169	Missouri	Pulaski County
PL1	29	103	Missouri	Knox County	PL1	29	171	Missouri	Putnam County
PL1	29	105	Missouri	Laclede County	PL1	29	173	Missouri	Ralls County
PL1	29	107	Missouri	Lafayette County	PL1	29	175	Missouri	Randolph County
PL1	29	109	Missouri	Lawrence County	PL1	29	177	Missouri	Ray County
PL1	29	111	Missouri	Lewis County	PL1	29	179	Missouri	Reynolds County
PL1	29	113	Missouri	Lincoln County	PL1	29	181	Missouri	Ripley County
PL1	29	115	Missouri	Linn County	G6	29	183	Missouri	St Charles County
PL1	29	117	Missouri	Livingston County	PL1	29	185	Missouri	St Clair County
PL1	29	119	Missouri	Mc Donald County	PL1	29	187	Missouri	St Francois County
PL1	29	121	Missouri	Macon County	G6	29	510	Missouri	St Louis City
PL1	29	123	Missouri	Madison County	G6	29	189	Missouri	St Louis County
PL1	29	125	Missouri	Maries County	PL1	29	186	Missouri	Ste Genevieve County
PL1	29	127	Missouri	Marion County	PL1	29	195	Missouri	Saline County
PL1	29	129	Missouri	Mercer County	PL1	29	197	Missouri	Schuylerville County
PL1	29	131	Missouri	Miller County	PL1	29	199	Missouri	Scotland County
PL1	29	133	Missouri	Mississippi County	PL1	29	201	Missouri	Scott County
PL1	29	135	Missouri	Moniteau County	PL1	29	203	Missouri	Shannon County
PL1	29	137	Missouri	Monroe County	PL1	29	205	Missouri	Shelby County
PL1	29	139	Missouri	Montgomery County	PL1	29	207	Missouri	Stoddard County
PL1	29	141	Missouri	Morgan County	PL1	29	209	Missouri	Stone County
PL1	29	143	Missouri	New Madrid County	PL1	29	211	Missouri	Sullivan County
PL1	29	145	Missouri	Newton County	PL1	29	213	Missouri	Taney County
PL1	29	147	Missouri	Nodaway County	PL1	29	215	Missouri	Texas County
PL1	29	149	Missouri	Oregon County	PL1	29	217	Missouri	Vernon County
PL1	29	151	Missouri	Osage County	PL1	29	219	Missouri	Warren County
PL1	29	153	Missouri	Ozark County	PL1	29	221	Missouri	Washington County
PL1	29	155	Missouri	Pemiscot County	PL1	29	223	Missouri	Wayne County
PL1	29	157	Missouri	Perry County	PL1	29	225	Missouri	Webster County
PL1	29	159	Missouri	Pettis County	PL1	29	227	Missouri	Worth County
PL1	29	161	Missouri	Phelps County	PL1	29	229	Missouri	Wright County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R6	30	1	Montana	Beaverhead County	R6	30	69	Montana	Petroleum County
R6	30	3	Montana	Big Horn County	R6	30	71	Montana	Phillips County
R6	30	5	Montana	Blaine County	R6	30	73	Montana	Pondera County
R6	30	7	Montana	Broadwater County	R6	30	75	Montana	Powder River County
R6	30	9	Montana	Carbon County	R6	30	77	Montana	Powell County
R6	30	11	Montana	Carter County	R6	30	79	Montana	Prairie County
R6	30	13	Montana	Cascade County	R6	30	81	Montana	Ravalli County
R6	30	15	Montana	Chouteau County	R6	30	83	Montana	Richland County
R6	30	17	Montana	Custer County	R6	30	85	Montana	Roosevelt County
R6	30	19	Montana	Daniels County	R6	30	87	Montana	Rosebud County
R6	30	21	Montana	Dawson County	R6	30	89	Montana	Sanders County
R6	30	23	Montana	Deer Lodge County	R6	30	91	Montana	Sheridan County
R6	30	25	Montana	Fallon County	R6	30	93	Montana	Silver Bow County
R6	30	27	Montana	Fergus County	R6	30	95	Montana	Stillwater County
R6	30	29	Montana	Flat Head County	R6	30	97	Montana	Sweet Grass County
R6	30	31	Montana	Gallatin County	R6	30	99	Montana	Teton County
R6	30	33	Montana	Garfield County	R6	30	101	Montana	Toole County
R6	30	35	Montana	Glacier County	R6	30	103	Montana	Treasure County
R6	30	37	Montana	Golden Valley County	R6	30	105	Montana	Valley County
R6	30	39	Montana	Granite County	R6	30	107	Montana	Wheatland County
R6	30	41	Montana	Hill County	R6	30	109	Montana	Wibaux County
R6	30	43	Montana	Jefferson County	R6	30	111	Montana	Yellowstone County
R6	30	45	Montana	Judith Basin County	R6	30	113	Montana	Yellowstone Pk County
R6	30	47	Montana	Lake County	PL3	31	1	Nebraska	Adams County
R6	30	49	Montana	Lewis And Clark County	PL3	31	3	Nebraska	Antelope County
R6	30	51	Montana	Liberty County	PL3	31	5	Nebraska	Arthur County
R6	30	53	Montana	Lincoln County	PL3	31	7	Nebraska	Banner County
R6	30	55	Montana	Mc Cone County	PL3	31	9	Nebraska	Blaine County
R6	30	57	Montana	Madison County	PL3	31	11	Nebraska	Boone County
R6	30	59	Montana	Meagher County	PL3	31	13	Nebraska	Box Butte County
R6	30	61	Montana	Mineral County	PL3	31	15	Nebraska	Boyd County
R6	30	63	Montana	Missoula County	PL3	31	17	Nebraska	Brown County
R6	30	65	Montana	Musselshell County	PL3	31	19	Nebraska	Buffalo County
R6	30	67	Montana	Park County	PL3	31	21	Nebraska	Burt County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
PL3	31	23	Nebraska	Butler County	PL3	31	91	Nebraska	Hooker County
PL3	31	25	Nebraska	Cass County	PL3	31	93	Nebraska	Howard County
PL3	31	27	Nebraska	Cedar County	PL3	31	95	Nebraska	Jefferson County
PL3	31	29	Nebraska	Chase County	PL3	31	97	Nebraska	Johnson County
PL3	31	31	Nebraska	Cherry County	PL3	31	99	Nebraska	Kearney County
PL3	31	33	Nebraska	Cheyenne County	PL3	31	101	Nebraska	Keith County
PL3	31	35	Nebraska	Clay County	PL3	31	103	Nebraska	Keya Paha County
PL3	31	37	Nebraska	Colfax County	PL3	31	105	Nebraska	Kimball County
PL3	31	39	Nebraska	Cuming County	PL3	31	107	Nebraska	Knox County
PL3	31	41	Nebraska	Custer County	PL3	31	109	Nebraska	Lancaster County
PL3	31	43	Nebraska	Dakota County	PL3	31	111	Nebraska	Lincoln County
PL3	31	45	Nebraska	Dawes County	PL3	31	113	Nebraska	Logan County
PL3	31	47	Nebraska	Dawson County	PL3	31	115	Nebraska	Loup County
PL3	31	49	Nebraska	Deuel County	PL3	31	117	Nebraska	Mc Pherson County
PL3	31	51	Nebraska	Dixon County	PL3	31	119	Nebraska	Madison County
PL3	31	53	Nebraska	Dodge County	PL3	31	121	Nebraska	Merrick County
PL3	31	55	Nebraska	Douglas County	PL3	31	123	Nebraska	Morrill County
PL3	31	57	Nebraska	Dundy County	PL3	31	125	Nebraska	Nance County
PL3	31	59	Nebraska	Fillmore County	PL3	31	127	Nebraska	Nemaha County
PL3	31	61	Nebraska	Franklin County	PL3	31	129	Nebraska	Nuckolls County
PL3	31	63	Nebraska	Frontier County	PL3	31	131	Nebraska	Otoe County
PL3	31	65	Nebraska	Furnas County	PL3	31	133	Nebraska	Pawnee County
PL3	31	67	Nebraska	Gage County	PL3	31	135	Nebraska	Perkins County
PL3	31	69	Nebraska	Garden County	PL3	31	137	Nebraska	Phelps County
PL3	31	71	Nebraska	Garfield County	PL3	31	139	Nebraska	Pierce County
PL3	31	73	Nebraska	Gosper County	PL3	31	141	Nebraska	Platte County
PL3	31	75	Nebraska	Grant County	PL3	31	143	Nebraska	Polk County
PL3	31	77	Nebraska	Greeley County	PL3	31	145	Nebraska	Red Willow County
PL3	31	79	Nebraska	Hall County	PL3	31	147	Nebraska	Richardson County
PL3	31	81	Nebraska	Hamilton County	PL3	31	149	Nebraska	Rock County
PL3	31	83	Nebraska	Harlan County	PL3	31	151	Nebraska	Saline County
PL3	31	85	Nebraska	Hayes County	PL3	31	153	Nebraska	Sarpy County
PL3	31	87	Nebraska	Hitchcock County	PL3	31	155	Nebraska	Saunders County
PL3	31	89	Nebraska	Holt County	PL3	31	157	Nebraska	Scotts Bluff County

**Table A-1 (continued)**

<b>Model Region</b>	<b>FIPS State</b>	<b>FIPS County</b>	<b>State</b>	<b>County</b>	<b>Model Region</b>	<b>FIPS State</b>	<b>FIPS County</b>	<b>State</b>	<b>County</b>
PL3	31	159	Nebraska	Seward County	NE6	33	7	New Hampshire	Coos County
PL3	31	161	Nebraska	Sheridan County	NE6	33	9	New Hampshire	Grafton County
PL3	31	163	Nebraska	Sherman County	NE1	33	11	New Hampshire	Hillsborough County
PL3	31	165	Nebraska	Sioux County	NE6	33	13	New Hampshire	Merrimack County
PL3	31	167	Nebraska	Stanton County	NE3	33	15	New Hampshire	Rockingham County
PL3	31	169	Nebraska	Thayer County	NE3	33	17	New Hampshire	Strafford County
PL3	31	171	Nebraska	Thomas County	NE6	33	19	New Hampshire	Sullivan County
PL3	31	173	Nebraska	Thurston County	M7	34	1	New Jersey	Atlantic County
PL3	31	175	Nebraska	Valley County	M1	34	3	New Jersey	Bergen County
PL3	31	177	Nebraska	Washington County	M3	34	5	New Jersey	Burlington County
PL3	31	179	Nebraska	Wayne County	M3	34	7	New Jersey	Camden County
PL3	31	181	Nebraska	Webster County	M7	34	9	New Jersey	Cape May County
PL3	31	183	Nebraska	Wheeler County	M3	34	11	New Jersey	Cumberland County
PL3	31	185	Nebraska	York County	M1	34	13	New Jersey	Essex County
FW7	32	510	Nevada	Carson City	M3	34	15	New Jersey	Gloucester County
FW7	32	1	Nevada	Churchill County	M1	34	17	New Jersey	Hudson County
FW7	32	3	Nevada	Clark County	M1	34	19	New Jersey	Hunterdon County
FW7	32	5	Nevada	Douglas County	M3	34	21	New Jersey	Mercer County
FW7	32	7	Nevada	Elko County	M1	34	23	New Jersey	Middlesex County
FW7	32	9	Nevada	Esmeralda County	M1	34	25	New Jersey	Monmouth County
FW7	32	11	Nevada	Eureka County	M1	34	27	New Jersey	Morris County
FW7	32	13	Nevada	Humboldt County	M1	34	29	New Jersey	Ocean County
FW7	32	15	Nevada	Lander County	M1	34	31	New Jersey	Passaic County
FW7	32	17	Nevada	Lincoln County	M3	34	33	New Jersey	Salem County
FW7	32	19	Nevada	Lyon County	M1	34	35	New Jersey	Somerset County
FW7	32	21	Nevada	Mineral County	M1	34	37	New Jersey	Sussex County
FW7	32	23	Nevada	Nye County	M1	34	39	New Jersey	Union County
FW7	32	27	Nevada	Pershing County	M7	34	41	New Jersey	Warren County
FW7	32	29	Nevada	Storey County	W7	35	1	New Mexico	Bernalillo County
FW7	32	31	Nevada	Washoe County	W7	35	3	New Mexico	Catron County
FW7	32	33	Nevada	White Pine County	W7	35	5	New Mexico	Chaves County
NE6	33	1	New Hampshire	Belknap County	W7	35	6	New Mexico	Cibola County
NE6	33	3	New Hampshire	Carroll County	W7	35	7	New Mexico	Colfax County
NE6	33	5	New Hampshire	Cheshire County	W7	35	9	New Mexico	Curry County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W7	35	11	New Mexico	De Baca County	M6	36	15	New York	Chemung County
W7	35	13	New Mexico	Dona Ana County	M6	36	17	New York	Chenango County
W7	35	15	New Mexico	Eddy County	M6	36	19	New York	Clinton County
W7	35	17	New Mexico	Grant County	M6	36	21	New York	Columbia County
W7	35	19	New Mexico	Guadalupe County	M6	36	23	New York	Cortland County
W7	35	21	New Mexico	Harding County	M6	36	25	New York	Delaware County
W7	35	23	New Mexico	Hidalgo County	M6	36	27	New York	Dutchess County
W7	35	25	New Mexico	Lea County	M6	36	29	New York	Erie County
W7	35	27	New Mexico	Lincoln County	M6	36	31	New York	Essex County
W7	35	28	New Mexico	Los Alamos County	M6	36	33	New York	Franklin County
W7	35	29	New Mexico	Luna County	M6	36	35	New York	Fulton County
W7	35	31	New Mexico	Mc Kinley County	M6	36	37	New York	Genesee County
W7	35	33	New Mexico	Mora County	M6	36	39	New York	Greene County
W7	35	35	New Mexico	Otero County	M6	36	41	New York	Hamilton County
W7	35	37	New Mexico	Quay County	M6	36	43	New York	Herkimer County
W7	35	39	New Mexico	Rio Arriba County	M6	36	45	New York	Jefferson County
W7	35	41	New Mexico	Roosevelt County	M1	36	47	New York	Kings County
W7	35	43	New Mexico	Sandoval County	M6	36	49	New York	Lewis County
W7	35	45	New Mexico	San Juan County	M6	36	51	New York	Livingston County
W7	35	47	New Mexico	San Miguel County	M6	36	53	New York	Madison County
W7	35	49	New Mexico	Santa Fe County	M6	36	55	New York	Monroe County
W7	35	51	New Mexico	Sierra County	M6	36	57	New York	Montgomery County
W7	35	53	New Mexico	Socorro County	M1	36	59	New York	Nassau County
W7	35	55	New Mexico	Taos County	M1	36	61	New York	New York County
W7	35	57	New Mexico	Torrance County	M6	36	63	New York	Niagara County
W7	35	59	New Mexico	Union County	M6	36	65	New York	Oneida County
W7	35	61	New Mexico	Valencia County	M6	36	67	New York	Onondaga County
M6	36	1	New York	Albany County	M6	36	69	New York	Ontario County
M6	36	3	New York	Allegany County	M1	36	71	New York	Orange County
M1	36	5	New York	Bronx County	M6	36	73	New York	Orleans County
M6	36	7	New York	Broome County	M6	36	75	New York	Oswego County
M6	36	9	New York	Cattaraugus County	M6	36	77	New York	Otsego County
M6	36	11	New York	Cayuga County	M1	36	79	New York	Putnam County
M6	36	13	New York	Chautauqua County	M1	36	81	New York	Queens County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
M6	36	83	New York	Rensselaer County	S6	37	27	North Carolina	Caldwell County
M1	36	85	New York	Richmond County	S6	37	29	North Carolina	Camden County
M1	36	87	New York	Rockland County	S6	37	31	North Carolina	Carteret County
M6	36	89	New York	St. Lawrence County	S6	37	33	North Carolina	Caswell County
M6	36	91	New York	Saratoga County	S6	37	35	North Carolina	Catawba County
M6	36	93	New York	Schenectady County	S7	37	37	North Carolina	Chatham County
M6	36	95	New York	Schoharie County	S6	37	39	North Carolina	Cherokee County
M6	36	97	New York	Schuyler County	S6	37	41	North Carolina	Chowan County
M6	36	99	New York	Seneca County	S6	37	43	North Carolina	Clay County
M6	36	101	New York	Steuben County	S6	37	45	North Carolina	Cleveland County
M1	36	103	New York	Suffolk County	S6	37	47	North Carolina	Columbus County
M6	36	105	New York	Sullivan County	S6	37	49	North Carolina	Craven County
M6	36	107	New York	Tioga County	S6	37	51	North Carolina	Cumberland County
M6	36	109	New York	Tompkins County	S6	37	53	North Carolina	Currituck County
M6	36	111	New York	Ulster County	S6	37	55	North Carolina	Dare County
M6	36	113	New York	Warren County	S9	37	57	North Carolina	Davidson County
M6	36	115	New York	Washington County	S9	37	59	North Carolina	Davie County
M6	36	117	New York	Wayne County	S6	37	61	North Carolina	Duplin County
M1	36	119	New York	Westchester County	S7	37	63	North Carolina	Durham County
M6	36	121	New York	Wyoming County	S6	37	65	North Carolina	Edgecombe County
M6	36	123	New York	Yates County	S9	37	67	North Carolina	Forsyth County
S9	37	1	North Carolina	Alamance County	S7	37	69	North Carolina	Franklin County
S6	37	3	North Carolina	Alexander County	S8	37	71	North Carolina	Gaston County
S6	37	5	North Carolina	Alleghany County	S6	37	73	North Carolina	Gates County
S6	37	7	North Carolina	Anson County	S6	37	75	North Carolina	Graham County
S6	37	9	North Carolina	Ashe County	S6	37	77	North Carolina	Granville County
S6	37	11	North Carolina	Avery County	S6	37	79	North Carolina	Greene County
S6	37	13	North Carolina	Beaufort County	S9	37	81	North Carolina	Guilford County
S6	37	15	North Carolina	Bertie County	S6	37	83	North Carolina	Halifax County
S6	37	17	North Carolina	Bladen County	S6	37	85	North Carolina	Harnett County
S6	37	19	North Carolina	Brunswick County	S6	37	87	North Carolina	Haywood County
S6	37	21	North Carolina	Buncombe County	S6	37	89	North Carolina	Henderson County
S6	37	23	North Carolina	Burke County	S6	37	91	North Carolina	Hertford County
S8	37	25	North Carolina	Cabarrus County	S6	37	93	North Carolina	Hoke County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S6	37	95	North Carolina	Hyde County	S6	37	163	North Carolina	Sampson County
S8	37	97	North Carolina	Iredell County	S6	37	165	North Carolina	Scotland County
S6	37	99	North Carolina	Jackson County	S6	37	167	North Carolina	Stanly County
S7	37	101	North Carolina	Johnston County	S9	37	169	North Carolina	Stokes County
S6	37	103	North Carolina	Jones County	S6	37	171	North Carolina	Surry County
S6	37	105	North Carolina	Lee County	S6	37	173	North Carolina	Swain County
S6	37	107	North Carolina	Lenoir County	S6	37	175	North Carolina	Transylvania County
S8	37	109	North Carolina	Lincoln County	S6	37	177	North Carolina	Tyrrell County
S6	37	111	North Carolina	Mc Dowell County	S8	37	179	North Carolina	Union County
S6	37	113	North Carolina	Macon County	S6	37	181	North Carolina	Vance County
S6	37	115	North Carolina	Madison County	S7	37	183	North Carolina	Wake County
S6	37	117	North Carolina	Martin County	S6	37	185	North Carolina	Warren County
S8	37	119	North Carolina	Mecklenburg County	S6	37	187	North Carolina	Washington County
S6	37	121	North Carolina	Mitchell County	S6	37	189	North Carolina	Watauga County
S6	37	123	North Carolina	Montgomery County	S6	37	191	North Carolina	Wayne County
S6	37	125	North Carolina	Moore County	S6	37	193	North Carolina	Wilkes County
S6	37	127	North Carolina	Nash County	S6	37	195	North Carolina	Wilson County
S6	37	129	North Carolina	New Hanover County	S9	37	197	North Carolina	Yadkin County
S6	37	131	North Carolina	Northampton County	S6	37	199	North Carolina	Yancey County
S6	37	133	North Carolina	Onslow County	R4	38	1	North Dakota	Adams County
S7	37	135	North Carolina	Orange County	R4	38	3	North Dakota	Barnes County
S6	37	137	North Carolina	Pamlico County	R4	38	5	North Dakota	Benson County
S6	37	139	North Carolina	Pasquotank County	R4	38	7	North Dakota	Billings County
S6	37	141	North Carolina	Pender County	R4	38	9	North Dakota	Bottineau County
S6	37	143	North Carolina	Perquimans County	R4	38	11	North Dakota	Bowman County
S6	37	145	North Carolina	Person County	R4	38	13	North Dakota	Burke County
S6	37	147	North Carolina	Pitt County	R4	38	15	North Dakota	Burleigh County
S6	37	149	North Carolina	Polk County	R4	38	17	North Dakota	Cass County
S9	37	151	North Carolina	Randolph County	R4	38	19	North Dakota	Cavalier County
S6	37	153	North Carolina	Richmond County	R4	38	21	North Dakota	Dickey County
S6	37	155	North Carolina	Robeson County	R4	38	23	North Dakota	Divide County
S6	37	157	North Carolina	Rockingham County	R4	38	25	North Dakota	Dunn County
S8	37	159	North Carolina	Rowan County	R4	38	27	North Dakota	Eddy County
S6	37	161	North Carolina	Rutherford County	R4	38	29	North Dakota	Emmons County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R4	38	31	North Dakota	Foster County	R4	38	99	North Dakota	Walsh County
R4	38	33	North Dakota	Golden Valley County	R4	38	101	North Dakota	Ward County
R4	38	35	North Dakota	Grand Forks County	R4	38	103	North Dakota	Wells County
R4	38	37	North Dakota	Grant County	R4	38	105	North Dakota	Williams County
R4	38	39	North Dakota	Griggs County	G10	39	1	Ohio	Adams County
R4	38	41	North Dakota	Hettinger County	G10	39	3	Ohio	Allen County
R4	38	43	North Dakota	Kidder County	G10	39	5	Ohio	Ashland County
R4	38	45	North Dakota	La Moure County	G10	39	7	Ohio	Ashtabula County
R4	38	47	North Dakota	Logan County	G10	39	9	Ohio	Athens County
R4	38	49	North Dakota	Mc Henry County	G10	39	11	Ohio	Auglaize County
R4	38	51	North Dakota	Mc Intosh County	G10	39	13	Ohio	Belmont County
R4	38	53	North Dakota	Mc Kenzie County	G10	39	15	Ohio	Brown County
R4	38	55	North Dakota	Mc Lean County	G5	39	17	Ohio	Butler County
R4	38	57	North Dakota	Mercer County	G10	39	19	Ohio	Carroll County
R4	38	59	North Dakota	Morton County	G10	39	21	Ohio	Champaign County
R4	38	61	North Dakota	Mountrail County	G10	39	23	Ohio	Clark County
R4	38	63	North Dakota	Nelson County	G5	39	25	Ohio	Clermont County
R4	38	65	North Dakota	Oliver County	G10	39	27	Ohio	Clinton County
R4	38	67	North Dakota	Pembina County	G10	39	29	Ohio	Columbiana County
R4	38	69	North Dakota	Pierce County	G10	39	31	Ohio	Coshocton County
R4	38	71	North Dakota	Ramsey County	G10	39	33	Ohio	Crawford County
R4	38	73	North Dakota	Ransom County	G10	39	35	Ohio	Cuyahoga County
R4	38	75	North Dakota	Renville County	G10	39	37	Ohio	Darke County
R4	38	77	North Dakota	Richland County	G10	39	39	Ohio	Defiance County
R4	38	79	North Dakota	Rolette County	G10	39	41	Ohio	Delaware County
R4	38	81	North Dakota	Sargent County	G10	39	43	Ohio	Erie County
R4	38	83	North Dakota	Sheridan County	G10	39	45	Ohio	Fairfield County
R4	38	85	North Dakota	Sioux County	G10	39	47	Ohio	Fayette County
R4	38	87	North Dakota	Slope County	G10	39	49	Ohio	Franklin County
R4	38	89	North Dakota	Stark County	G10	39	51	Ohio	Fulton County
R4	38	91	North Dakota	Steele County	G10	39	53	Ohio	Gallia County
R4	38	93	North Dakota	Stutsman County	G10	39	55	Ohio	Geauga County
R4	38	95	North Dakota	Towner County	G10	39	57	Ohio	Greene County
R4	38	97	North Dakota	Traill County	G10	39	59	Ohio	Guernsey County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G5	39	61	Ohio	Hamilton County	G10	39	129	Ohio	Pickaway County
G10	39	63	Ohio	Hancock County	G10	39	131	Ohio	Pike County
G10	39	65	Ohio	Hardin County	G10	39	133	Ohio	Portage County
G10	39	67	Ohio	Harrison County	G10	39	135	Ohio	Preble County
G10	39	69	Ohio	Henry County	G10	39	137	Ohio	Putnam County
G10	39	71	Ohio	Highland County	G10	39	139	Ohio	Richland County
G10	39	73	Ohio	Hocking County	G10	39	141	Ohio	Ross County
G10	39	75	Ohio	Holmes County	G10	39	143	Ohio	Sandusky County
G10	39	77	Ohio	Huron County	G10	39	145	Ohio	Scioto County
G10	39	79	Ohio	Jackson County	G10	39	147	Ohio	Seneca County
G10	39	81	Ohio	Jefferson County	G10	39	149	Ohio	Shelby County
G10	39	83	Ohio	Knox County	G10	39	151	Ohio	Stark County
G10	39	85	Ohio	Lake County	G10	39	153	Ohio	Summit County
G10	39	87	Ohio	Lawrence County	G10	39	155	Ohio	Trumbull County
G10	39	89	Ohio	Licking County	G10	39	157	Ohio	Tuscarawas County
G10	39	91	Ohio	Logan County	G10	39	159	Ohio	Union County
G10	39	93	Ohio	Lorain County	G10	39	161	Ohio	Van Wert County
G10	39	95	Ohio	Lucas County	G10	39	163	Ohio	Vinton County
G10	39	97	Ohio	Madison County	G5	39	165	Ohio	Warren County
G10	39	99	Ohio	Mahoning County	G10	39	167	Ohio	Washington County
G10	39	101	Ohio	Marion County	G10	39	169	Ohio	Wayne County
G10	39	103	Ohio	Medina County	G10	39	171	Ohio	Williams County
G10	39	105	Ohio	Meigs County	G10	39	173	Ohio	Wood County
G10	39	107	Ohio	Mercer County	G10	39	175	Ohio	Wyandot County
G10	39	109	Ohio	Miami County	W8	40	1	Oklahoma	Adair County
G10	39	111	Ohio	Monroe County	W8	40	3	Oklahoma	Alfalfa County
G10	39	113	Ohio	Montgomery County	W8	40	5	Oklahoma	Atoka County
G10	39	115	Ohio	Morgan County	W8	40	7	Oklahoma	Beaver County
G10	39	117	Ohio	Morrow County	W8	40	9	Oklahoma	Beckham County
G10	39	119	Ohio	Muskingum County	W8	40	11	Oklahoma	Blaine County
G10	39	121	Ohio	Noble County	W8	40	13	Oklahoma	Bryan County
G10	39	123	Ohio	Ottawa County	W8	40	15	Oklahoma	Caddo County
G10	39	125	Ohio	Paulding County	W8	40	17	Oklahoma	Canadian County
G10	39	127	Ohio	Perry County	W8	40	19	Oklahoma	Carter County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W8	40	21	Oklahoma	Cherokee County	W8	40	89	Oklahoma	Mc Curtain County
W8	40	23	Oklahoma	Choctaw County	W8	40	91	Oklahoma	Mc Intosh County
W8	40	25	Oklahoma	Cimarron County	W8	40	93	Oklahoma	Major County
W8	40	27	Oklahoma	Cleveland County	W8	40	95	Oklahoma	Marshall County
W8	40	29	Oklahoma	Coal County	W8	40	97	Oklahoma	Mayes County
W8	40	31	Oklahoma	Comanche County	W8	40	99	Oklahoma	Murray County
W8	40	33	Oklahoma	Cotton County	W8	40	101	Oklahoma	Muskogee County
W8	40	35	Oklahoma	Craig County	W8	40	103	Oklahoma	Noble County
W8	40	37	Oklahoma	Creek County	W8	40	105	Oklahoma	Nowata County
W8	40	39	Oklahoma	Custer County	W8	40	107	Oklahoma	Okfuskee County
W8	40	41	Oklahoma	Delaware County	W8	40	109	Oklahoma	Oklahoma County
W8	40	43	Oklahoma	Dewey County	W8	40	111	Oklahoma	Omulgee County
W8	40	45	Oklahoma	Ellis County	W8	40	113	Oklahoma	Osage County
W8	40	47	Oklahoma	Garfield County	W8	40	115	Oklahoma	Ottawa County
W8	40	49	Oklahoma	Garvin County	W8	40	117	Oklahoma	Pawnee County
W8	40	51	Oklahoma	Grady County	W8	40	119	Oklahoma	Payne County
W8	40	53	Oklahoma	Grant County	W8	40	121	Oklahoma	Pittsburg County
W8	40	55	Oklahoma	Greer County	W8	40	123	Oklahoma	Pontotoc County
W8	40	57	Oklahoma	Harmon County	W8	40	125	Oklahoma	Pottawatomie County
W8	40	59	Oklahoma	Harper County	W8	40	127	Oklahoma	Pushmataha County
W8	40	61	Oklahoma	Haskell County	W8	40	129	Oklahoma	Roger Mills County
W8	40	63	Oklahoma	Hughes County	W8	40	131	Oklahoma	Rogers County
W8	40	65	Oklahoma	Jackson County	W8	40	133	Oklahoma	Seminole County
W8	40	67	Oklahoma	Jefferson County	W8	40	135	Oklahoma	Sequoyah County
W8	40	69	Oklahoma	Johnston County	W8	40	137	Oklahoma	Stephens County
W8	40	71	Oklahoma	Kay County	W8	40	139	Oklahoma	Texas County
W8	40	73	Oklahoma	Kingfisher County	W8	40	141	Oklahoma	Tillman County
W8	40	75	Oklahoma	Kiowa County	W8	40	143	Oklahoma	Tulsa County
W8	40	77	Oklahoma	Latimer County	W8	40	145	Oklahoma	Wagoner County
W8	40	79	Oklahoma	Le Flore County	W8	40	147	Oklahoma	Washington County
W8	40	81	Oklahoma	Lincoln County	W8	40	149	Oklahoma	Washita County
W8	40	83	Oklahoma	Logan County	W8	40	151	Oklahoma	Woods County
W8	40	85	Oklahoma	Love County	W8	40	153	Oklahoma	Woodward County
W8	40	87	Oklahoma	Mc Clain County	R8	41	1	Oregon	Baker County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R8	41	3	Oregon	Benton County	R8	41	71	Oregon	Yamhill County
R8	41	5	Oregon	Clackamas County	M8	42	1	Pennsylvania	Adams County
R8	41	7	Oregon	Clatsop County	M8	42	3	Pennsylvania	Allegheny County
R8	41	9	Oregon	Columbia County	M8	42	5	Pennsylvania	Armstrong County
R8	41	11	Oregon	Coos County	M8	42	7	Pennsylvania	Beaver County
R8	41	13	Oregon	Crook County	M8	42	9	Pennsylvania	Bedford County
R8	41	15	Oregon	Curry County	M8	42	11	Pennsylvania	Berks County
R8	41	17	Oregon	Deschutes County	M8	42	13	Pennsylvania	Blair County
R8	41	19	Oregon	Douglas County	M8	42	15	Pennsylvania	Bradford County
R8	41	21	Oregon	Gilliam County	M3	42	17	Pennsylvania	Bucks County
R8	41	23	Oregon	Grant County	M8	42	19	Pennsylvania	Butler County
R8	41	25	Oregon	Harney County	M8	42	21	Pennsylvania	Cambria County
R8	41	27	Oregon	Hood River County	M8	42	23	Pennsylvania	Cameron County
R8	41	29	Oregon	Jackson County	M8	42	25	Pennsylvania	Carbon County
R8	41	31	Oregon	Jefferson County	M8	42	27	Pennsylvania	Centre County
R8	41	33	Oregon	Josephine County	M3	42	29	Pennsylvania	Chester County
R8	41	35	Oregon	Klamath County	M8	42	31	Pennsylvania	Clarion County
R8	41	37	Oregon	Lake County	M8	42	33	Pennsylvania	Clearfield County
R8	41	39	Oregon	Lane County	M8	42	35	Pennsylvania	Clinton County
R8	41	41	Oregon	Lincoln County	M8	42	37	Pennsylvania	Columbia County
R8	41	43	Oregon	Linn County	M8	42	39	Pennsylvania	Crawford County
R8	41	45	Oregon	Malheur County	M8	42	41	Pennsylvania	Cumberland County
R8	41	47	Oregon	Marion County	M8	42	43	Pennsylvania	Dauphin County
R8	41	49	Oregon	Morrow County	M3	42	45	Pennsylvania	Delaware County
R8	41	51	Oregon	Multnomah County	M8	42	47	Pennsylvania	Elk County
R8	41	53	Oregon	Polk County	M8	42	49	Pennsylvania	Erie County
R8	41	55	Oregon	Sherman County	M8	42	51	Pennsylvania	Fayette County
R8	41	57	Oregon	Tillamook County	M8	42	53	Pennsylvania	Forest County
R8	41	59	Oregon	Umatilla County	M8	42	55	Pennsylvania	Franklin County
R8	41	61	Oregon	Union County	M8	42	57	Pennsylvania	Fulton County
R8	41	63	Oregon	Wallowa County	M8	42	59	Pennsylvania	Greene County
R8	41	65	Oregon	Wasco County	M8	42	61	Pennsylvania	Huntingdon County
R8	41	67	Oregon	Washington County	M8	42	63	Pennsylvania	Indiana County
R8	41	69	Oregon	Wheeler County	M8	42	65	Pennsylvania	Jefferson County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
M8	42	67	Pennsylvania	Juniata County	NE4	44	1	Rhode Island	Bristol County
M8	42	69	Pennsylvania	Lackawanna County	NE4	44	3	Rhode Island	Kent County
M8	42	71	Pennsylvania	Lancaster County	NE4	44	5	Rhode Island	Newport County
M8	42	73	Pennsylvania	Lawrence County	NE4	44	7	Rhode Island	Providence County
M8	42	75	Pennsylvania	Lebanon County	NE4	44	9	Rhode Island	Washington County
M8	42	77	Pennsylvania	Lehigh County	S12	45	1	South Carolina	Abbeville County
M8	42	79	Pennsylvania	Luzerne County	S12	45	3	South Carolina	Aiken County
M8	42	81	Pennsylvania	Lycoming County	S12	45	5	South Carolina	Allendale County
M8	42	83	Pennsylvania	Mc Kean County	S12	45	7	South Carolina	Anderson County
M8	42	85	Pennsylvania	Mercer County	S12	45	9	South Carolina	Bamberg County
M8	42	87	Pennsylvania	Mifflin County	S12	45	11	South Carolina	Barnwell County
M8	42	89	Pennsylvania	Monroe County	S12	45	13	South Carolina	Beaufort County
M3	42	91	Pennsylvania	Montgomery County	S12	45	15	South Carolina	Berkeley County
M8	42	93	Pennsylvania	Montour County	S12	45	17	South Carolina	Calhoun County
M8	42	95	Pennsylvania	Northampton County	S12	45	19	South Carolina	Charleston County
M8	42	97	Pennsylvania	Northumberland County	S12	45	21	South Carolina	Cherokee County
M8	42	99	Pennsylvania	Perry County	S12	45	23	South Carolina	Chester County
M3	42	101	Pennsylvania	Philadelphia County	S12	45	25	South Carolina	Chesterfield County
M8	42	103	Pennsylvania	Pike County	S12	45	27	South Carolina	Clarendon County
M8	42	105	Pennsylvania	Potter County	S12	45	29	South Carolina	Colleton County
M8	42	107	Pennsylvania	Schuylkill County	S12	45	31	South Carolina	Darlington County
M8	42	109	Pennsylvania	Snyder County	S12	45	33	South Carolina	Dillon County
M8	42	111	Pennsylvania	Somerset County	S12	45	35	South Carolina	Dorchester County
M8	42	113	Pennsylvania	Sullivan County	S12	45	37	South Carolina	Edgefield County
M8	42	115	Pennsylvania	Susquehanna County	S12	45	39	South Carolina	Fairfield County
M8	42	117	Pennsylvania	Tioga County	S12	45	41	South Carolina	Florence County
M8	42	119	Pennsylvania	Union County	S12	45	43	South Carolina	Georgetown County
M8	42	121	Pennsylvania	Venango County	S12	45	45	South Carolina	Greenville County
M8	42	123	Pennsylvania	Warren County	S12	45	47	South Carolina	Greenwood County
M8	42	125	Pennsylvania	Washington County	S12	45	49	South Carolina	Hampton County
M8	42	127	Pennsylvania	Wayne County	S12	45	51	South Carolina	Horry County
M8	42	129	Pennsylvania	Westmoreland County	S12	45	53	South Carolina	Jasper County
M8	42	131	Pennsylvania	Wyoming County	S12	45	55	South Carolina	Kershaw County
M8	42	133	Pennsylvania	York County	S12	45	57	South Carolina	Lancaster County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S12	45	59	South Carolina	Laurens County	R5	46	37	South Dakota	Day County
S12	45	61	South Carolina	Lee County	R5	46	39	South Dakota	Deuel County
S12	45	63	South Carolina	Lexington County	R5	46	41	South Dakota	Dewey County
S12	45	65	South Carolina	Mc Cormick County	R5	46	43	South Dakota	Douglas County
S12	45	67	South Carolina	Marion County	R5	46	45	South Dakota	Edmunds County
S12	45	69	South Carolina	Marlboro County	R5	46	47	South Dakota	Fall River County
S12	45	71	South Carolina	Newberry County	R5	46	49	South Dakota	Faulk County
S12	45	73	South Carolina	Oconee County	R5	46	51	South Dakota	Grant County
S12	45	75	South Carolina	Orangeburg County	R5	46	53	South Dakota	Gregory County
S12	45	77	South Carolina	Pickens County	R5	46	55	South Dakota	Haakon County
S12	45	79	South Carolina	Richland County	R5	46	57	South Dakota	Hamlin County
S12	45	81	South Carolina	Saluda County	R5	46	59	South Dakota	Hand County
S12	45	83	South Carolina	Spartanburg County	R5	46	61	South Dakota	Hanson County
S12	45	85	South Carolina	Sumter County	R5	46	63	South Dakota	Harding County
S12	45	87	South Carolina	Union County	R5	46	65	South Dakota	Hughes County
S12	45	89	South Carolina	Williamsburg County	R5	46	67	South Dakota	Hutchinson County
S8	45	91	South Carolina	York County	R5	46	69	South Dakota	Hyde County
R5	46	3	South Dakota	Aurora County	R5	46	71	South Dakota	Jackson County
R5	46	5	South Dakota	Beadle County	R5	46	73	South Dakota	Jerauld County
R5	46	7	South Dakota	Bennett County	R5	46	75	South Dakota	Jones County
R5	46	9	South Dakota	Bon Homme County	R5	46	77	South Dakota	Kingsbury County
R5	46	11	South Dakota	Brookings County	R5	46	79	South Dakota	Lake County
R5	46	13	South Dakota	Brown County	R5	46	81	South Dakota	Lawrence County
R5	46	15	South Dakota	Brule County	R5	46	83	South Dakota	Lincoln County
R5	46	17	South Dakota	Buffalo County	R5	46	85	South Dakota	Lyman County
R5	46	19	South Dakota	Butte County	R5	46	87	South Dakota	Mc Cook County
R5	46	21	South Dakota	Campbell County	R5	46	89	South Dakota	Mc Pherson County
R5	46	23	South Dakota	Charles Mix County	R5	46	91	South Dakota	Marshall County
R5	46	25	South Dakota	Clark County	R5	46	93	South Dakota	Meade County
R5	46	27	South Dakota	Clay County	R5	46	95	South Dakota	Mellette County
R5	46	29	South Dakota	Codington County	R5	46	97	South Dakota	Miner County
R5	46	31	South Dakota	Corson County	R5	46	99	South Dakota	Minnehaha County
R5	46	33	South Dakota	Custer County	R5	46	101	South Dakota	Moody County
R5	46	35	South Dakota	Davison County	R5	46	103	South Dakota	Pennington County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R5	46	105	South Dakota	Perkins County	S5	47	39	Tennessee	Decatur County
R5	46	107	South Dakota	Potter County	S5	47	41	Tennessee	De Kalb County
R5	46	109	South Dakota	Roberts County	S5	47	43	Tennessee	Dickson County
R5	46	111	South Dakota	Sanborn County	S5	47	45	Tennessee	Dyer County
R5	46	113	South Dakota	Shannon County	S5	47	47	Tennessee	Fayette County
R5	46	115	South Dakota	Spink County	S5	47	49	Tennessee	Fentress County
R5	46	117	South Dakota	Stanley County	S5	47	51	Tennessee	Franklin County
R5	46	119	South Dakota	Sully County	S5	47	53	Tennessee	Gibson County
R5	46	121	South Dakota	Todd County	S5	47	55	Tennessee	Giles County
R5	46	123	South Dakota	Tripp County	S5	47	57	Tennessee	Grainger County
R5	46	125	South Dakota	Turner County	S5	47	59	Tennessee	Greene County
R5	46	127	South Dakota	Union County	S5	47	61	Tennessee	Grundy County
R5	46	129	South Dakota	Walworth County	S5	47	63	Tennessee	Hamblen County
R5	46	135	South Dakota	Yankton County	S5	47	65	Tennessee	Hamilton County
R5	46	137	South Dakota	Ziebach County	S5	47	67	Tennessee	Hancock County
S5	47	1	Tennessee	Anderson County	S5	47	69	Tennessee	Hardeman County
S5	47	3	Tennessee	Bedford County	S5	47	71	Tennessee	Hardin County
S5	47	5	Tennessee	Benton County	S5	47	73	Tennessee	Hawkins County
S5	47	7	Tennessee	Bledsoe County	S5	47	75	Tennessee	Haywood County
S5	47	9	Tennessee	Blount County	S5	47	77	Tennessee	Henderson County
S5	47	11	Tennessee	Bradley County	S5	47	79	Tennessee	Henry County
S5	47	13	Tennessee	Campbell County	S5	47	81	Tennessee	Hickman County
S5	47	15	Tennessee	Cannon County	S5	47	83	Tennessee	Houston County
S5	47	17	Tennessee	Carroll County	S5	47	85	Tennessee	Humphreys County
S5	47	19	Tennessee	Carter County	S5	47	87	Tennessee	Jackson County
S5	47	21	Tennessee	Cheatham County	S5	47	89	Tennessee	Jefferson County
S5	47	23	Tennessee	Chester County	S5	47	91	Tennessee	Johnson County
S5	47	25	Tennessee	Claiborne County	S5	47	93	Tennessee	Knox County
S5	47	27	Tennessee	Clay County	S5	47	95	Tennessee	Lake County
S5	47	29	Tennessee	Cocke County	S5	47	97	Tennessee	Lauderdale County
S5	47	31	Tennessee	Coffee County	S5	47	99	Tennessee	Lawrence County
S5	47	33	Tennessee	Crockett County	S5	47	101	Tennessee	Lewis County
S5	47	35	Tennessee	Cumberland County	S5	47	103	Tennessee	Lincoln County
S5	47	37	Tennessee	Davidson County	S5	47	105	Tennessee	Loudon County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
S5	47	107	Tennessee	Mc Minn County	S5	47	175	Tennessee	Van Buren County
S5	47	109	Tennessee	Mc Nairy County	S5	47	177	Tennessee	Warren County
S5	47	111	Tennessee	Macon County	S5	47	179	Tennessee	Washington County
S5	47	113	Tennessee	Madison County	S5	47	181	Tennessee	Wayne County
S5	47	115	Tennessee	Marion County	S5	47	183	Tennessee	Weakley County
S5	47	117	Tennessee	Marshall County	S5	47	185	Tennessee	White County
S5	47	119	Tennessee	Maury County	S5	47	187	Tennessee	Williamson County
S5	47	121	Tennessee	Meigs County	S5	47	189	Tennessee	Wilson County
S5	47	123	Tennessee	Monroe County	W5	48	1	Texas	Anderson County
S5	47	125	Tennessee	Montgomery County	W5	48	3	Texas	Andrews County
S5	47	127	Tennessee	Moore County	W5	48	5	Texas	Angelina County
S5	47	129	Tennessee	Morgan County	W5	48	7	Texas	Aransas County
S5	47	131	Tennessee	Obion County	W5	48	9	Texas	Archer County
S5	47	133	Tennessee	Overton County	W5	48	11	Texas	Armstrong County
S5	47	135	Tennessee	Perry County	W5	48	13	Texas	Atascosa County
S5	47	137	Tennessee	Pickett County	W5	48	15	Texas	Austin County
S5	47	139	Tennessee	Polk County	W5	48	17	Texas	Bailey County
S5	47	141	Tennessee	Putnam County	W5	48	19	Texas	Bandera County
S5	47	143	Tennessee	Rhea County	W5	48	21	Texas	Bastrop County
S5	47	145	Tennessee	Roane County	W5	48	23	Texas	Baylor County
S5	47	147	Tennessee	Robertson County	W5	48	25	Texas	Bee County
S5	47	149	Tennessee	Rutherford County	W5	48	27	Texas	Bell County
S5	47	151	Tennessee	Scott County	W5	48	29	Texas	Bexar County
S5	47	153	Tennessee	Sequatchie County	W5	48	31	Texas	Blanco County
S5	47	155	Tennessee	Sevier County	W5	48	33	Texas	Borden County
S5	47	157	Tennessee	Shelby County	W5	48	35	Texas	Bosque County
S5	47	159	Tennessee	Smith County	W5	48	37	Texas	Bowie County
S5	47	161	Tennessee	Stewart County	W1	48	39	Texas	Brazoria County
S5	47	163	Tennessee	Sullivan County	W5	48	41	Texas	Brazos County
S5	47	165	Tennessee	Sumner County	W5	48	43	Texas	Brewster County
S5	47	167	Tennessee	Tipton County	W5	48	45	Texas	Briscoe County
S5	47	169	Tennessee	Troupsdale County	W5	48	47	Texas	Brooks County
S5	47	171	Tennessee	Unicoi County	W5	48	49	Texas	Brown County
S5	47	173	Tennessee	Union County	W5	48	51	Texas	Burleson County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W5	48	53	Texas	Burnet County	W5	48	121	Texas	Denton County
W5	48	55	Texas	Caldwell County	W5	48	123	Texas	De Witt County
W5	48	57	Texas	Calhoun County	W5	48	125	Texas	Dickens County
W5	48	59	Texas	Callahan County	W5	48	127	Texas	Dimmit County
W5	48	61	Texas	Cameron County	W5	48	129	Texas	Donley County
W5	48	63	Texas	Camp County	W5	48	131	Texas	Duval County
W5	48	65	Texas	Carson County	W5	48	133	Texas	Eastland County
W5	48	67	Texas	Cass County	W5	48	135	Texas	Ector County
W5	48	69	Texas	Castro County	W5	48	137	Texas	Edwards County
W1	48	71	Texas	Chambers County	W5	48	139	Texas	Ellis County
W5	48	73	Texas	Cherokee County	W4	48	141	Texas	El Paso County
W5	48	75	Texas	Childress County	W5	48	143	Texas	Erath County
W5	48	77	Texas	Clay County	W5	48	145	Texas	Falls County
W5	48	79	Texas	Cochran County	W5	48	147	Texas	Fannin County
W5	48	81	Texas	Coke County	W5	48	149	Texas	Fayette County
W5	48	83	Texas	Coleman County	W5	48	151	Texas	Fisher County
W5	48	85	Texas	Collin County	W5	48	153	Texas	Floyd County
W5	48	87	Texas	Collingsworth County	W5	48	155	Texas	Foard County
W5	48	89	Texas	Colorado County	W1	48	157	Texas	Fort Bend County
W5	48	91	Texas	Comal County	W5	48	159	Texas	Franklin County
W5	48	93	Texas	Comanche County	W5	48	161	Texas	Freestone County
W5	48	95	Texas	Concho County	W5	48	163	Texas	Frio County
W5	48	97	Texas	Cooke County	W5	48	165	Texas	Gaines County
W5	48	99	Texas	Coryell County	W1	48	167	Texas	Galveston County
W5	48	101	Texas	Cottle County	W5	48	169	Texas	Garza County
W5	48	103	Texas	Crane County	W5	48	171	Texas	Gillespie County
W5	48	105	Texas	Crockett County	W5	48	173	Texas	Glasscock County
W5	48	107	Texas	Crosby County	W5	48	175	Texas	Goliad County
W5	48	109	Texas	Culberson County	W5	48	177	Texas	Gonzales County
W5	48	111	Texas	Dallam County	W5	48	179	Texas	Gray County
W5	48	113	Texas	Dallas County	W5	48	181	Texas	Grayson County
W5	48	115	Texas	Dawson County	W5	48	183	Texas	Gregg County
W5	48	117	Texas	Deaf Smith County	W5	48	185	Texas	Grimes County
W5	48	119	Texas	Delta County	W5	48	187	Texas	Guadalupe County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W5	48	189	Texas	Hale County	W5	48	257	Texas	Kaufman County
W5	48	191	Texas	Hall County	W5	48	259	Texas	Kendall County
W5	48	193	Texas	Hamilton County	W5	48	261	Texas	Kenedy County
W5	48	195	Texas	Hansford County	W5	48	263	Texas	Kent County
W5	48	197	Texas	Hardeman County	W5	48	265	Texas	Kerr County
W3	48	199	Texas	Hardin County	W5	48	267	Texas	Kimble County
W1	48	201	Texas	Harris County	W5	48	269	Texas	King County
W5	48	203	Texas	Harrison County	W5	48	271	Texas	Kinney County
W5	48	205	Texas	Hartley County	W5	48	273	Texas	Kleberg County
W5	48	207	Texas	Haskell County	W5	48	275	Texas	Knox County
W5	48	209	Texas	Hays County	W5	48	277	Texas	Lamar County
W5	48	211	Texas	Hemphill County	W5	48	279	Texas	Lamb County
W5	48	213	Texas	Henderson County	W5	48	281	Texas	Lampasas County
W5	48	215	Texas	Hidalgo County	W5	48	283	Texas	La Salle County
W5	48	217	Texas	Hill County	W5	48	285	Texas	Lavaca County
W5	48	219	Texas	Hockley County	W5	48	287	Texas	Lee County
W5	48	221	Texas	Hood County	W5	48	289	Texas	Leon County
W5	48	223	Texas	Hopkins County	W1	48	291	Texas	Liberty County
W5	48	225	Texas	Houston County	W5	48	293	Texas	Limestone County
W5	48	227	Texas	Howard County	W5	48	295	Texas	Lipscomb County
W5	48	229	Texas	Hudspeth County	W5	48	297	Texas	Live Oak County
W5	48	231	Texas	Hunt County	W5	48	299	Texas	Llano County
W5	48	233	Texas	Hutchinson County	W5	48	301	Texas	Loving County
W5	48	235	Texas	Irion County	W5	48	303	Texas	Lubbock County
W5	48	237	Texas	Jack County	W5	48	305	Texas	Lynn County
W5	48	239	Texas	Jackson County	W5	48	307	Texas	Mc Culloch County
W5	48	241	Texas	Jasper County	W5	48	309	Texas	Mc Lennan County
W5	48	243	Texas	Jeff Davis County	W5	48	311	Texas	Mc Mullen County
W3	48	245	Texas	Jefferson County	W5	48	313	Texas	Madison County
W5	48	247	Texas	Jim Hogg County	W5	48	315	Texas	Marion County
W5	48	249	Texas	Jim Wells County	W5	48	317	Texas	Martin County
W5	48	251	Texas	Johnson County	W5	48	319	Texas	Mason County
W5	48	253	Texas	Jones County	W5	48	321	Texas	Matagorda County
W5	48	255	Texas	Karnes County	W5	48	323	Texas	Maverick County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W5	48	325	Texas	Medina County	W5	48	393	Texas	Roberts County
W5	48	327	Texas	Menard County	W5	48	395	Texas	Robertson County
W5	48	329	Texas	Midland County	W5	48	397	Texas	Rockwall County
W5	48	331	Texas	Milam County	W5	48	399	Texas	Runnels County
W5	48	333	Texas	Mills County	W5	48	401	Texas	Rusk County
W5	48	335	Texas	Mitchell County	W5	48	403	Texas	Sabine County
W5	48	337	Texas	Montague County	W5	48	405	Texas	San Augustine County
W1	48	339	Texas	Montgomery County	W5	48	407	Texas	San Jacinto County
W5	48	341	Texas	Moore County	W5	48	409	Texas	San Patricio County
W5	48	343	Texas	Morris County	W5	48	411	Texas	San Saba County
W5	48	345	Texas	Motley County	W5	48	413	Texas	Schleicher County
W5	48	347	Texas	Nacogdoches County	W5	48	415	Texas	Scurry County
W5	48	349	Texas	Navarro County	W5	48	417	Texas	Shackelford County
W5	48	351	Texas	Newton County	W5	48	419	Texas	Shelby County
W5	48	353	Texas	Nolan County	W5	48	421	Texas	Sherman County
W5	48	355	Texas	Nueces County	W5	48	423	Texas	Smith County
W5	48	357	Texas	Ochiltree County	W5	48	425	Texas	Somervell County
W5	48	359	Texas	Oldham County	W5	48	427	Texas	Starr County
W3	48	361	Texas	Orange County	W5	48	429	Texas	Stephens County
W5	48	363	Texas	Palo Pinto County	W5	48	431	Texas	Sterling County
W5	48	365	Texas	Panola County	W5	48	433	Texas	Stonewall County
W5	48	367	Texas	Parker County	W5	48	435	Texas	Sutton County
W5	48	369	Texas	Parmer County	W5	48	437	Texas	Swisher County
W5	48	371	Texas	Pecos County	W5	48	439	Texas	Tarrant County
W5	48	373	Texas	Polk County	W5	48	441	Texas	Taylor County
W5	48	375	Texas	Potter County	W5	48	443	Texas	Terrell County
W5	48	377	Texas	Presidio County	W5	48	445	Texas	Terry County
W5	48	379	Texas	Rains County	W5	48	447	Texas	Throckmorton County
W5	48	381	Texas	Randall County	W5	48	449	Texas	Titus County
W5	48	383	Texas	Reagan County	W5	48	451	Texas	Tom Green County
W5	48	385	Texas	Real County	W5	48	453	Texas	Travis County
W5	48	387	Texas	Red River County	W5	48	455	Texas	Trinity County
W5	48	389	Texas	Reeves County	W5	48	457	Texas	Tyler County
W5	48	391	Texas	Refugio County	W5	48	459	Texas	Upshur County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
W5	48	461	Texas	Upton County	R2	49	21	Utah	Iron County
W5	48	463	Texas	Uvalde County	R2	49	23	Utah	Juab County
W5	48	465	Texas	Val Verde County	R2	49	25	Utah	Kane County
W5	48	467	Texas	Van Zandt County	R2	49	27	Utah	Millard County
W5	48	469	Texas	Victoria County	R2	49	29	Utah	Morgan County
W5	48	471	Texas	Walker County	R2	49	31	Utah	Piute County
W1	48	473	Texas	Waller County	R2	49	33	Utah	Rich County
W5	48	475	Texas	Ward County	R2	49	35	Utah	Salt Lake County
W5	48	477	Texas	Washington County	R2	49	37	Utah	San Juan County
W5	48	479	Texas	Webb County	R2	49	39	Utah	Sanpete County
W5	48	481	Texas	Wharton County	R2	49	41	Utah	Sevier County
W5	48	483	Texas	Wheeler County	R2	49	43	Utah	Summit County
W5	48	485	Texas	Wichita County	R2	49	45	Utah	Tooele County
W5	48	487	Texas	Wilbarger County	R2	49	47	Utah	Uintah County
W5	48	489	Texas	Willacy County	R2	49	49	Utah	Utah County
W5	48	491	Texas	Williamson County	R2	49	51	Utah	Wasatch County
W5	48	493	Texas	Wilson County	R2	49	53	Utah	Washington County
W5	48	495	Texas	Winkler County	R2	49	55	Utah	Wayne County
W5	48	497	Texas	Wise County	R2	49	57	Utah	Weber County
W5	48	499	Texas	Wood County	NE8	50	1	Vermont	Addison County
W5	48	501	Texas	Yoakum County	NE8	50	3	Vermont	Bennington County
W5	48	503	Texas	Young County	NE8	50	5	Vermont	Caledonia County
W5	48	505	Texas	Zapata County	NE8	50	7	Vermont	Chittenden County
W5	48	507	Texas	Zavala County	NE8	50	9	Vermont	Essex County
R2	49	1	Utah	Beaver County	NE8	50	11	Vermont	Franklin County
R2	49	3	Utah	Box Elder County	NE8	50	13	Vermont	Grand Isle County
R2	49	5	Utah	Cache County	NE8	50	15	Vermont	Lamoille County
R2	49	7	Utah	Carbon County	NE8	50	17	Vermont	Orange County
R2	49	9	Utah	Daggett County	NE8	50	19	Vermont	Orleans County
R2	49	11	Utah	Davis County	NE8	50	21	Vermont	Rutland County
R2	49	13	Utah	Duchesne County	NE8	50	23	Vermont	Washington County
R2	49	15	Utah	Emery County	NE8	50	25	Vermont	Windham County
R2	49	17	Utah	Garfield County	NE8	50	27	Vermont	Windsor County
R2	49	19	Utah	Grand County	M10	51	1	Virginia	Accomack County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
M10	51	3	Virginia	Albemarle County	M10	51	51	Virginia	Dickenson County
M4	51	510	Virginia	Alexandria	M10	51	53	Virginia	Dinwiddie County
M10	51	5	Virginia	Alleghany County	M10	51	595	Virginia	Emporia
M10	51	7	Virginia	Amelia County	M10	51	57	Virginia	Essex County
M10	51	9	Virginia	Amherst County	M4	51	59	Virginia	Fairfax County
M10	51	11	Virginia	Appomattox County	M4	51	600	Virginia	Fairfax
M4	51	13	Virginia	Arlington County	M4	51	610	Virginia	Falls Church
M10	51	15	Virginia	Augusta County	M10	51	61	Virginia	Fauquier County
M10	51	17	Virginia	Bath County	M10	51	63	Virginia	Floyd County
M10	51	19	Virginia	Bedford County	M10	51	65	Virginia	Fluvanna County
M10	51	515	Virginia	Bedford	M10	51	67	Virginia	Franklin County
M10	51	21	Virginia	Bland County	M10	51	620	Virginia	Franklin
M10	51	23	Virginia	Botetourt County	M10	51	69	Virginia	Frederick County
M10	51	520	Virginia	Bristol	M10	51	630	Virginia	Fredericksburg
M10	51	25	Virginia	Brunswick County	M10	51	640	Virginia	Galax
M10	51	27	Virginia	Buchanan County	M10	51	71	Virginia	Giles County
M10	51	29	Virginia	Buckingham County	M10	51	73	Virginia	Gloucester County
M10	51	530	Virginia	Buena Vista	M10	51	75	Virginia	Goochland County
M10	51	31	Virginia	Campbell County	M10	51	77	Virginia	Grayson County
M10	51	33	Virginia	Caroline County	M10	51	79	Virginia	Greene County
M10	51	35	Virginia	Carroll County	M10	51	81	Virginia	Greenville County
M10	51	36	Virginia	Charles City County	M10	51	83	Virginia	Halifax County
M10	51	37	Virginia	Charlotte County	M10	51	650	Virginia	Hampton
M10	51	540	Virginia	Charlottesville	M10	51	85	Virginia	Hanover County
M10	51	550	Virginia	Chesapeake	M10	51	660	Virginia	Harrisonburg
M10	51	41	Virginia	Chesterfield County	M10	51	87	Virginia	Henrico County
M10	51	43	Virginia	Clarke County	M10	51	89	Virginia	Henry County
M10	51	560	Virginia	Clifton Forge	M10	51	91	Virginia	Highland County
M10	51	570	Virginia	Colonial Heights	M10	51	670	Virginia	Hopewell
M10	51	580	Virginia	Covington	M10	51	93	Virginia	Isle Of Wight County
M10	51	45	Virginia	Craig County	M10	51	95	Virginia	James City County
M10	51	47	Virginia	Culpeper County	M10	51	97	Virginia	King And Queen County
M10	51	49	Virginia	Cumberland County	M10	51	99	Virginia	King George County
M10	51	590	Virginia	Danville	M10	51	101	Virginia	King William County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
M10	51	103	Virginia	Lancaster County	M10	51	155	Virginia	Pulaski County
M10	51	105	Virginia	Lee County	M10	51	750	Virginia	Radford
M10	51	678	Virginia	Lexington	M10	51	157	Virginia	Rappahannock County
M4	51	107	Virginia	Loudoun County	M10	51	159	Virginia	Richmond County
M10	51	109	Virginia	Louisa County	M10	51	760	Virginia	Richmond
M10	51	111	Virginia	Lunenburg County	M10	51	161	Virginia	Roanoke County
M10	51	680	Virginia	Lynchburg	M10	51	770	Virginia	Roanoke
M10	51	113	Virginia	Madison County	M10	51	163	Virginia	Rockbridge County
M4	51	683	Virginia	Manassas	M10	51	165	Virginia	Rockingham County
M4	51	685	Virginia	Manassas Park	M10	51	167	Virginia	Russell County
M10	51	690	Virginia	Martinsville	M10	51	775	Virginia	Salem
M10	51	115	Virginia	Mathews County	M10	51	169	Virginia	Scott County
M10	51	117	Virginia	Mecklenburg County	M10	51	171	Virginia	Shenandoah County
M10	51	119	Virginia	Middlesex County	M10	51	173	Virginia	Smyth County
M10	51	121	Virginia	Montgomery County	M10	51	780	Virginia	South Boston
M10	51	125	Virginia	Nelson County	M10	51	175	Virginia	Southampton County
M10	51	127	Virginia	New Kent County	M10	51	177	Virginia	Spotsylvania County
M10	51	700	Virginia	Newport News	M4	51	179	Virginia	Stafford County
M10	51	710	Virginia	Norfolk	M10	51	790	Virginia	Staunton
M10	51	131	Virginia	Northampton County	M10	51	800	Virginia	Suffolk
M10	51	133	Virginia	Northumberland County	M10	51	181	Virginia	Surry County
M10	51	720	Virginia	Norton	M10	51	183	Virginia	Sussex County
M10	51	135	Virginia	Nottoway County	M10	51	185	Virginia	Tazewell County
M10	51	137	Virginia	Orange County	M10	51	810	Virginia	Virginia Beach
M10	51	139	Virginia	Page County	M10	51	187	Virginia	Warren County
M10	51	141	Virginia	Patrick County	M10	51	191	Virginia	Washington County
M10	51	730	Virginia	Petersburg	M10	51	820	Virginia	Waynesboro
M10	51	143	Virginia	Pittsylvania County	M10	51	193	Virginia	Westmoreland County
M10	51	735	Virginia	Poquoson	M10	51	830	Virginia	Williamsburg
M10	51	740	Virginia	Portsmouth	M10	51	840	Virginia	Winchester
M10	51	145	Virginia	Powhatan County	M10	51	195	Virginia	Wise County
M10	51	147	Virginia	Prince Edward County	M10	51	197	Virginia	Wythe County
M10	51	149	Virginia	Prince George County	M10	51	199	Virginia	York County
M4	51	153	Virginia	Prince William County					

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
R9	53	1	Washington	Adams County	R9	53	69	Washington	Wahkiakum County
R9	53	3	Washington	Asotin County	R9	53	71	Washington	Walla Walla County
R9	53	5	Washington	Benton County	R9	53	73	Washington	Whatcom County
R9	53	7	Washington	Chelan County	R9	53	75	Washington	Whitman County
R9	53	9	Washington	Clallam County	R9	53	77	Washington	Yakima County
R9	53	11	Washington	Clark County	M11	54	1	West Virginia	Barbour County
R9	53	13	Washington	Columbia County	M11	54	3	West Virginia	Berkeley County
R9	53	15	Washington	Cowlitz County	M11	54	5	West Virginia	Boone County
R9	53	17	Washington	Douglas County	M11	54	7	West Virginia	Braxton County
R9	53	19	Washington	Ferry County	M11	54	9	West Virginia	Brooke County
R9	53	21	Washington	Franklin County	M5	54	11	West Virginia	Cabell County
R9	53	23	Washington	Garfield County	M11	54	13	West Virginia	Calhoun County
R9	53	25	Washington	Grant County	M11	54	15	West Virginia	Clay County
R9	53	27	Washington	Grays Harbor County	M11	54	17	West Virginia	Doddridge County
R9	53	29	Washington	Island County	M11	54	19	West Virginia	Fayette County
R9	53	31	Washington	Jefferson County	M11	54	21	West Virginia	Gilmer County
R9	53	33	Washington	King County	M11	54	23	West Virginia	Grant County
R9	53	35	Washington	Kitsap County	M11	54	25	West Virginia	Greenbrier County
R9	53	37	Washington	Kittitas County	M11	54	27	West Virginia	Hampshire County
R9	53	39	Washington	Klickitat County	M11	54	29	West Virginia	Hancock County
R9	53	41	Washington	Lewis County	M11	54	31	West Virginia	Hardy County
R9	53	43	Washington	Lincoln County	M11	54	33	West Virginia	Harrison County
R9	53	45	Washington	Mason County	M11	54	35	West Virginia	Jackson County
R9	53	47	Washington	Okanogan County	M11	54	37	West Virginia	Jefferson County
R9	53	49	Washington	Pacific County	M11	54	39	West Virginia	Kanawha County
R9	53	51	Washington	Pend Oreille County	M11	54	41	West Virginia	Lewis County
R9	53	53	Washington	Pierce County	M11	54	43	West Virginia	Lincoln County
R9	53	55	Washington	San Juan County	M11	54	45	West Virginia	Logan County
R9	53	57	Washington	Skagit County	M11	54	47	West Virginia	Mc Dowell County
R9	53	59	Washington	Skamania County	M11	54	49	West Virginia	Marion County
R9	53	61	Washington	Snohomish County	M11	54	51	West Virginia	Marshall County
R9	53	63	Washington	Spokane County	M11	54	53	West Virginia	Mason County
R9	53	65	Washington	Stevens County	M11	54	55	West Virginia	Mercer County
R9	53	67	Washington	Thurston County	M11	54	57	West Virginia	Mineral County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
M11	54	59	West Virginia	Mingo County	G9	55	17	Wisconsin	Chippewa County
M11	54	61	West Virginia	Monongalia County	G9	55	19	Wisconsin	Clark County
M11	54	63	West Virginia	Monroe County	G9	55	21	Wisconsin	Columbia County
M11	54	65	West Virginia	Morgan County	G9	55	23	Wisconsin	Crawford County
M11	54	67	West Virginia	Nicholas County	G9	55	25	Wisconsin	Dane County
M11	54	69	West Virginia	Ohio County	G9	55	27	Wisconsin	Dodge County
M11	54	71	West Virginia	Pendleton County	G9	55	29	Wisconsin	Door County
M11	54	73	West Virginia	Pleasants County	G9	55	31	Wisconsin	Douglas County
M11	54	75	West Virginia	Pocahontas County	G9	55	33	Wisconsin	Dunn County
M11	54	77	West Virginia	Preston County	G9	55	35	Wisconsin	Eau Claire County
M11	54	79	West Virginia	Putnam County	G9	55	37	Wisconsin	Florence County
M11	54	81	West Virginia	Raleigh County	G9	55	39	Wisconsin	Fond Du Lac County
M11	54	83	West Virginia	Randolph County	G9	55	41	Wisconsin	Forest County
M11	54	85	West Virginia	Ritchie County	G9	55	43	Wisconsin	Grant County
M11	54	87	West Virginia	Roane County	G9	55	45	Wisconsin	Green County
M11	54	89	West Virginia	Summers County	G9	55	47	Wisconsin	Green Lake County
M11	54	91	West Virginia	Taylor County	G9	55	49	Wisconsin	Iowa County
M11	54	93	West Virginia	Tucker County	G9	55	51	Wisconsin	Iron County
M11	54	95	West Virginia	Tyler County	G9	55	53	Wisconsin	Jackson County
M11	54	97	West Virginia	Upshur County	G9	55	55	Wisconsin	Jefferson County
M5	54	99	West Virginia	Wayne County	G9	55	57	Wisconsin	Juneau County
M11	54	101	West Virginia	Webster County	G2	55	59	Wisconsin	Kenosha County
M11	54	103	West Virginia	Wetzel County	G9	55	61	Wisconsin	Kewaunee County
M11	54	105	West Virginia	Wirt County	G9	55	63	Wisconsin	La Crosse County
M11	54	107	West Virginia	Wood County	G9	55	65	Wisconsin	Lafayette County
M11	54	109	West Virginia	Wyoming County	G9	55	67	Wisconsin	Langlade County
G9	55	1	Wisconsin	Adams County	G9	55	69	Wisconsin	Lincoln County
G9	55	3	Wisconsin	Ashland County	G9	55	71	Wisconsin	Manitowoc County
G9	55	5	Wisconsin	Barron County	G9	55	73	Wisconsin	Marathon County
G9	55	7	Wisconsin	Bayfield County	G9	55	75	Wisconsin	Marinette County
G9	55	9	Wisconsin	Brown County	G9	55	77	Wisconsin	Marquette County
G9	55	11	Wisconsin	Buffalo County	G9	55	78	Wisconsin	Menominee County
G9	55	13	Wisconsin	Burnett County	G2	55	79	Wisconsin	Milwaukee County
G9	55	15	Wisconsin	Calumet County	G9	55	81	Wisconsin	Monroe County

**Table A-1 (continued)**

Model Region	FIPS State	FIPS County	State	County	Model Region	FIPS State	FIPS County	State	County
G9	55	83	Wisconsin	Oconto County	G9	55	137	Wisconsin	Waushara County
G9	55	85	Wisconsin	Oneida County	G9	55	139	Wisconsin	Winnebago County
G9	55	87	Wisconsin	Outagamie County	G9	55	141	Wisconsin	Wood County
G2	55	89	Wisconsin	Ozaukee County	R3	56	1	Wyoming	Albany County
G9	55	91	Wisconsin	Pepin County	R3	56	3	Wyoming	Big Horn County
G9	55	93	Wisconsin	Pierce County	R3	56	5	Wyoming	Campbell County
G9	55	95	Wisconsin	Polk County	R3	56	7	Wyoming	Carbon County
G9	55	97	Wisconsin	Portage County	R3	56	9	Wyoming	Converse County
G9	55	99	Wisconsin	Price County	R3	56	11	Wyoming	Crook County
G2	55	101	Wisconsin	Racine County	R3	56	13	Wyoming	Fremont County
G9	55	103	Wisconsin	Richland County	R3	56	15	Wyoming	Goshen County
G9	55	105	Wisconsin	Rock County	R3	56	17	Wyoming	Hot Springs County
G9	55	107	Wisconsin	Rusk County	R3	56	19	Wyoming	Johnson County
G9	55	109	Wisconsin	St Croix County	R3	56	21	Wyoming	Laramie County
G9	55	111	Wisconsin	Sauk County	R3	56	23	Wyoming	Lincoln County
G9	55	113	Wisconsin	Sawyer County	R3	56	25	Wyoming	Natrona County
G9	55	115	Wisconsin	Shawano County	R3	56	27	Wyoming	Niobrara County
G4	55	117	Wisconsin	Sheboygan County	R3	56	29	Wyoming	Park County
G9	55	119	Wisconsin	Taylor County	R3	56	31	Wyoming	Platte County
G9	55	121	Wisconsin	Trempealeau County	R3	56	33	Wyoming	Sheridan County
G9	55	123	Wisconsin	Vernon County	R3	56	35	Wyoming	Sublette County
G9	55	125	Wisconsin	Vilas County	R3	56	37	Wyoming	Sweetwater County
G9	55	127	Wisconsin	Walworth County	R3	56	39	Wyoming	Teton County
G9	55	129	Wisconsin	Washburn County	R3	56	41	Wyoming	Uinta County
G2	55	131	Wisconsin	Washington County	R3	56	43	Wyoming	Washakie County
G2	55	133	Wisconsin	Waukesha County	R3	56	45	Wyoming	Weston County
G9	55	135	Wisconsin	Waupaca County					

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## APPENDIX B

### EGAS 4.0 OUTPUT FILE FORMATS:

### EGAS OUTPUT OPTION

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This appendix presents the format of the output files created when running EGAS 4.0 under the EGAS output option. These examples are for model runs of Addison county, Vermont for the years 2005 and 2007 (in addition, EGAS 4.0 automatically outputs 1996 growth factors of '1.0' to indicate that 1996 is the EGAS 4.0 base year). The appendix first displays the file format when the *SCC* output option is selected. This is followed by the file formats for the *2-Digit SIC* and *EPS Input* options, respectively.

#### ***SOURCE CLASSIFICATION CODE (SCC) OUTPUT OPTION***

Filename: AREA\_FUEL.SCC

Created on: Friday, January 26, 2001 15:10:21

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2199001000	1.0000	0.9455	0.9042
50	001	2199002000	1.0000	0.9455	0.9042
50	001	2199003000	1.0000	0.9455	0.9042
.	.				
.	.				

Filename: COM\_FUEL.SCC

Created on: Friday, January 26, 2001 15:10:20

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10300101	1.0000	1.0774	1.0882
50	001	10300102	1.0000	1.0774	1.0882
50	001	10300103	1.0000	1.0774	1.0882

.

.

.

Filename: ELECTRIC.SCC

Created on: Friday, January 26, 2001 15:10:21

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10100101	1.0000	0.9459	0.9042
50	001	10100102	1.0000	0.9459	0.9042
50	001	10100201	1.0000	0.9459	0.9042

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Filename: IND\_FUEL.SCC

Created on: Friday, January 26, 2001 15:10:20

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10200101	1.0000	1.0000	1.0000
50	001	10200104	1.0000	1.0000	1.0000
50	001	10200107	1.0000	1.0000	1.0000

.

Filename: OTHER.SCC

Created on: Friday, January 26, 2001 15:10:25

The current forecast is:

- Based on "no growth" assumption
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2701001000	1.0000	1.0000	1.0000
50	001	2701010000	1.0000	1.0000	1.0000
50	001	2701020000	1.0000	1.0000	1.0000

Filename: PHY.SCC

Created on: Friday, January 26, 2001 15:10:20

The current forecast is:

- Based on the National BLS forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	20400101	1.0000	1.0000	1.0000
50	001	20400102	1.0000	1.0000	1.0000
50	001	20400110	1.0000	1.0000	1.0000

Filename: RES\_FUEL.SCC

Created on: Friday, January 26, 2001 15:10:20

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2104001000	1.0000	1.0765	1.0647

50 001 2104002000 1.0000 1.0765 1.0647  
50 001 2104004000 1.0000 0.8569 0.8397  
. .  
. .

Filename: VMT\_OUT.SCC

Created on: Friday, January 26, 2001 15:10:21

The current forecast is:

- Based on two-phase EPA forecasting approach
- For years 1996, 2005, 2007

ST CTY SCC 1996 2005 2007  
50 001 2201001000 1.0000 1.2023 1.2448  
50 001 2201001110 1.0000 1.2023 1.2448  
50 001 2201001111 1.0000 1.2023 1.2448  
. .  
. .

**2-DIGIT STANDARD INDUSTRIAL CLASSIFICATION OUTPUT OPTION**

Filename: COM\_FUEL.SIC

Created on: Friday, January 26, 2001 15:50:48

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SIC FUEL	1996	2005	2007
50	001	50 001	1.0000	1.0774	1.0882
50	001	50 002	1.0000	0.6857	0.6623
50	001	50 003	1.0000	0.8892	0.8983

.....

Filename: ELECTRIC.SIC

Created on: Friday, January 26, 2001 15:50:48

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SIC FUEL	1996	2005	2007
50	001	49 001	1.0000	1.2223	1.3591
50	001	49 002	1.0000	0.9505	1.0602
50	001	49 003	1.0000	1.0643	1.0982

.....

Filename: IND\_FUEL.SIC

Created on: Friday, January 26, 2001 15:50:48

The current forecast is:

- Based on the DOE forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	FUEL	1996	2005	2007
50	001	20	001	1.0000	0.9038	0.8804
50	001	20	002	1.0000	1.0927	1.1221
50	001	20	007	1.0000	0.9625	0.9843

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Filename: PHY.SIC

Created on: Friday, January 26, 2001 15:50:49

The current forecast is:

- Based on the National BLS forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	1996	2005	2007
50	001	01	1.0000	1.1685	1.2097
50	001	02	1.0000	1.1685	1.2097
50	001	07	1.0000	1.1237	1.1546

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### ***EPS INPUT OPTION***

When multiple projection years are output using the *EPS Input* option, the first row for each State/County/SCC combination represents the growth factor for the first projection year. The growth factors for this State/County/SCC combination for all the remaining projection years are then displayed in the rows that follow. In the PROJECT.AMS example below, 1.0000 is the year 1996 growth factor for SCC 210400100, while the 2005 and 2007 growth factors for this SCC are 1.0765 and 1.0647, respectively.

PROJECT.AMS:

```
/PROJECT.AMS/  
50001 2104001000 1.0000  
50001 2104001000 1.0765  
50001 2104001000 1.0647  
. .  
. .  
/END/
```

PROJECT.PTS:

```
/PROJECT.PTS/  
50001 10300101 1.0000  
50001 10300101 1.0774  
50001 10300101 1.0882  
. .  
. .  
/END/
```

---

## APPENDIX C

### EGAS 4.0 OUTPUT FILE FORMATS:

### BEAFAC OUTPUT OPTION

---

This appendix presents the format of the output files created when running EGAS 4.0 under the BEAFAC output option. These examples are for model runs of Addison county, Vermont for the years 2005 and 2007 (in addition, EGAS 4.0 automatically outputs 1996 growth factors of '1.0' to indicate that 1996 is the EGAS 4.0 base year). The appendix first displays the file format when the *SCC* output option is selected. This is followed by the file format for the *2-Digit SIC* option (note that there is no *EPS Input* option for output from BEAFAC because EPS has BEA growth factor output capabilities).

#### ***SOURCE CLASSIFICATION CODE (SCC) OUTPUT OPTION***

Filename: AREA\_FUEL.BEA

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2199001000	1.0000	1.0898	1.1094
50	001	2199002000	1.0000	1.0898	1.1094
50	001	2199003000	1.0000	1.0898	1.1094
.	.				
.	.				

Filename: COM\_FUEL.BEA

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10300101	1.0000	1.2550	1.3083
50	001	10300102	1.0000	1.2550	1.3083
50	001	10300103	1.0000	1.2550	1.3083

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.

.

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10100101	1.0000	1.1924	1.2303
50	001	10100102	1.0000	1.1924	1.2303
50	001	10100201	1.0000	1.1924	1.2303

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.

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Filename: IND\_FUEL.BEA

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	10200101	1.0000	1.0745	1.0959
50	001	10200104	1.0000	1.0745	1.0959
50	001	10200107	1.0000	1.0745	1.0959

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.

.Filename: OTHER.BEA

Created on: Friday, January 26, 2001 16:07:07

The current forecast is:

- Based on "no growth" assumption
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2701001000	1.0000	1.0000	1.0000
50	001	2701010000	1.0000	1.0000	1.0000
50	001	2701020000	1.0000	1.0000	1.0000

.

.

.

Filename: PHY.BEA

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	20400101	1.0000	1.3298	1.3761
50	001	20400102	1.0000	1.3298	1.3761
50	001	20400110	1.0000	1.3298	1.3761

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Filename: RES\_FUEL.BEA

Created on: Friday, January 26, 2001 16:07:03

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SCC	1996	2005	2007
50	001	2104001000	1.0000	1.0898	1.1094
50	001	2104002000	1.0000	1.0898	1.1094
50	001	2104004000	1.0000	1.0898	1.1094

.

**2-DIGIT STANDARD INDUSTRIAL CLASSIFICATION OUTPUT OPTION**

Filename: COM\_FUEL.BEA

Created on: Friday, January 26, 2001 16:14:41

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	FUEL	1996	2005	2007
50	001	50	001	1.0000	1.3254	1.3907
50	001	50	002	1.0000	1.3254	1.3907
50	001	50	003	1.0000	1.3254	1.3907

Filename: ELECTRIC.BEA

Created on: Friday, January 26, 2001 16:14:41

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	FUEL	1996	2005	2007
50	001	49	001	1.0000	1.1924	1.2303
50	001	49	002	1.0000	1.1924	1.2303
50	001	49	003	1.0000	1.1924	1.2303

Filename: IND\_FUEL.BEA

Created on: Friday, January 26, 2001 16:14:41

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	FUEL	1996	2005	2007
50	001	20	001	1.0000	1.1802	1.2151
50	001	20	002	1.0000	1.1802	1.2151
50	001	20	007	1.0000	1.1802	1.2151

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.

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Filename: PHY.BEA

Created on: Friday, January 26, 2001 16:14:41

The current forecast is:

- Based on the BEA forecast
- For years 1996, 2005, 2007

ST	CTY	SIC	1996	2005	2007
50	001	01	1.0000	1.2031	1.2434
50	001	02	1.0000	1.2031	1.2434
50	001	07	1.0000	1.4440	1.5424

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